

KRLM SERVICES

Version 10JA20

K

I

N

E

X

KINEXTM SERVICES

REVERSE LYSATE MICROARRAY CUSTOMER INFORMATION PACKAGE



Toll free: 1-866-KINEXUS or 604-323-2547

Facsimile: 604-323-2548

E-mail: info@kinexus.ca

www.kinexus.ca



TABLE OF CONTENTS

Kinex™ Reverse Lysate Microarray (KRLM) Services Description		PDF Page No.
1.	Introduction	3
2.	Client-supplied cell/tissue lysates	6
3.	Client-supplied antibodies	7
4.	Shipping of client-supplied lysates and antibodies	7
5.	Shipping information	8
6.	Pricing information	8
7.	Follow up services	9
8.	Forms to be completed	9
Descriptions of Available Cell and Tissue Lysates and Antibodies		
9.	Appendix A – List of cell lysates on the Standard Kinex™ Reverse Lysate Microarray	14
10.	Appendix B – List of tissue lysates on the Standard Kinex™ Reverse Lysate Microarray	15
Forms to Complete and Return with your Order		
11.	Service Order Form (KRLM-SOF)	16
12.	Standard Kinex™ Reverse Lysate Microarray Service Identification Form (KRLM-SSIF).....	17
13.	Custom Kinex™ Reverse Lysate Microarray Service Identification Form (KRLM-CSIF)	18
14.	Client-Supplied Lysate Description Form (KRLM-SDF-LY)	19
15.	Client-Supplied Non-Confidential Antibody Description Form (NSDF-AB) (only for customer antibodies).....	20
16.	Client-Supplied Confidential Antibody Description Form (CSDF-AB) (only for customer antibodies).....	21
17.	Commercial Invoice – Dry ice (required for customers outside of Canada)	22
18.	Commercial Invoice – Non-refrigerated (required for customers outside of Canada)	23
19.	Kinexus Service Agreement (first time customers only)	24
Examples of Kinex™ Reverse Lysate Microarray (KRLM) Data		
20.	Examples of bar graphs generated with Erk1 [pT202 and pY204] phospho-antibody probing	34



KINEX™ REVERSE LYSATE MICROARRAY (KRLM) SERVICES

1. INTRODUCTION

The vast majority of the proteins encoded by the genomes of humans and other species remain poorly characterized with respect to their distribution, functions and regulation. Our Standard and Custom Kinex™ Reverse Lysate Microarray (KRLM) services uniquely permit the rapid simultaneous quantification of specific proteins for their distribution and regulation from analysis of hundreds of lysates from diverse cells and tissues. With this convenient, cost effective and powerful service, clients can have about 250 cell and tissue lysates probed by Kinexus with one of hundreds of antibodies of their choice at a time. Our Standard service with cell and tissue lysates prepared in-house at Kinexus permits the characterization of cell signalling proteins for their regulation in response to a wide range of drugs and hormones in 12 diverse human tissue cell lines, in maturing frog oocytes, and their distribution in monkey, mouse and rat tissues. On our Standard Kinex™ Reverse Lysate Microarray, for the drug and hormonal treatments, the tumour cell lysates have been generated from dose response and time course studies that have been performed by Kinexus. Our Custom service utilizes cell and tissue lysates that are provided by our clients. These lysates are printed in triplicate at four dilutions on the Kinex™ Reverse Lysate Microarrays to ensure linearity of detection when the chip is probed with an antibody that specifically recognizes the target protein. Deliverables include a TIFF image of the scanned antibody probed microarray and an Excel spreadsheet with quantification of all of the lysate spots on the microarray. Clients may choose the probing antibody for use with the Kinex™ Reverse Microarray from our panel of over 800 available antibodies or have Kinexus perform the analysis with antibodies that they supply. This service is particularly ideal for the characterization of novel proteins that are identified initially with our Kinex™ Antibody Microarray service and have been subsequently shown with our Kinetworks™ Custom services to be specific for immune detection.

As the specificity of immunoreactivity of antibody can vary depending on the cell or tissue extract under examination, it is highly recommended to confirm key results by immunoblotting. Any interesting Kinex™ results that clients may wish to follow up can be validated by Western blotting with the same lysates used on the Standard Kinex™ Reverse Lysate Microarray. Our Custom Kinetworks™ KCSS 1.0 service allows clients to choose *any* 3 target proteins (of different molecular weight) to be quantified in 8 different samples side-by-side on the same immunoblot. The cell and tissue lysate samples from our In Vivo Services, which are used on the Kinex™ Reverse Lysate Microarray, may be used at no extra cost with the Custom Kinetworks™ KCSS 1.0 service. The availability of Kinetworks™ analyses is an important distinguishing feature of our Kinex™ microarray services as clients can have their research leads conveniently and inexpensively confirmed. Further information about the expression or phosphorylation of leads can be obtained through query of our KINET™ on-line DataBank with results from over 6000 Kinetworks™ immunoblots.

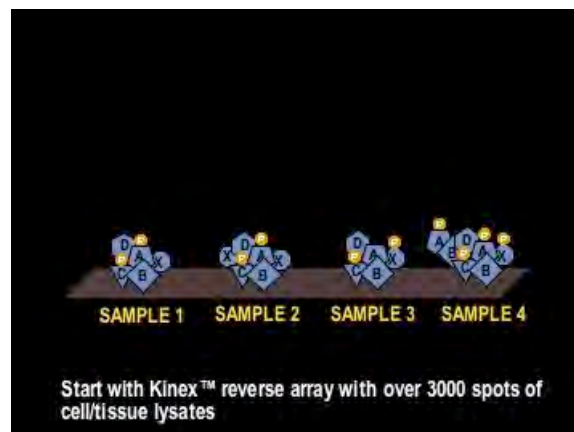
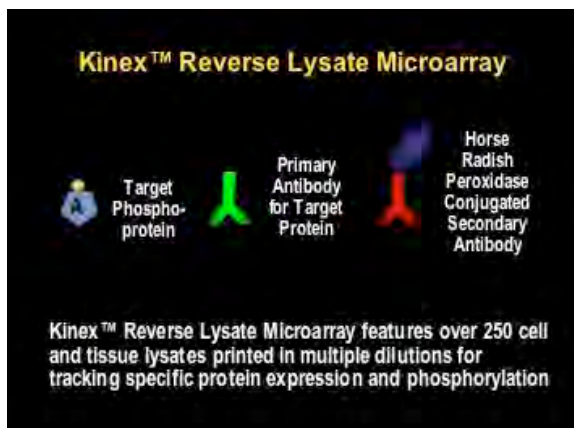
A notable advantage of the Kinex™ Reverse Lysate Microarray approach as compared to studies with tissue microarrays is the better retention of soluble cytoplasmic proteins in the reverse lysate microarrays. Kinexus has determined that about three quarters of most cell signalling proteins are found in the cytosol of cells, which is typically lost in fixed cell preparations or stain in a very diffuse pattern and are difficult to quantify for expression. Consequently, changes in protein expression or phosphorylation in response to a cellular perturbation are more accurately represented with the Kinex™ Reverse Lysate Microarray.

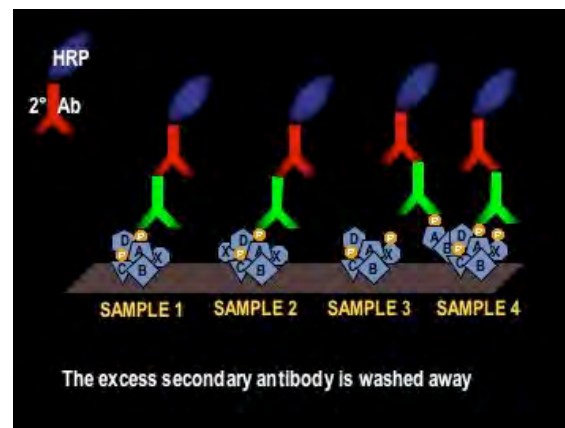
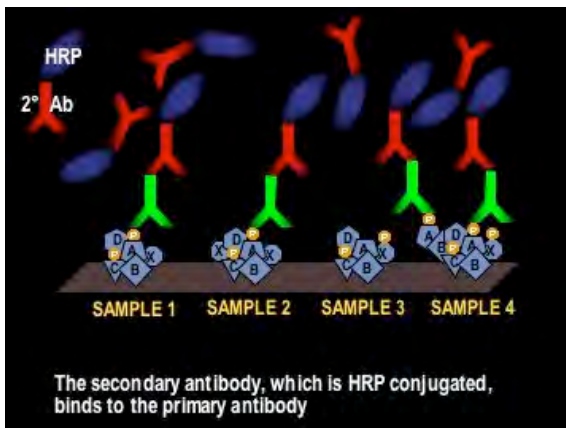
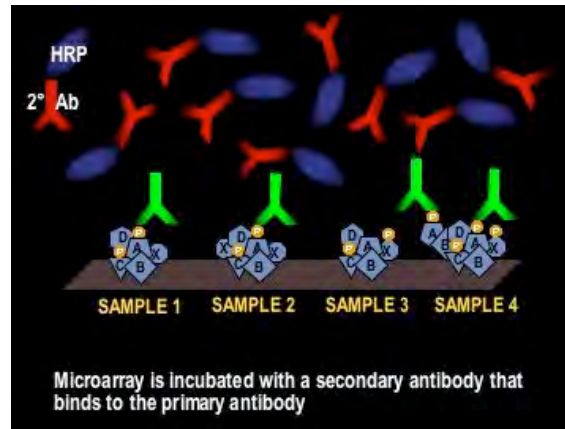
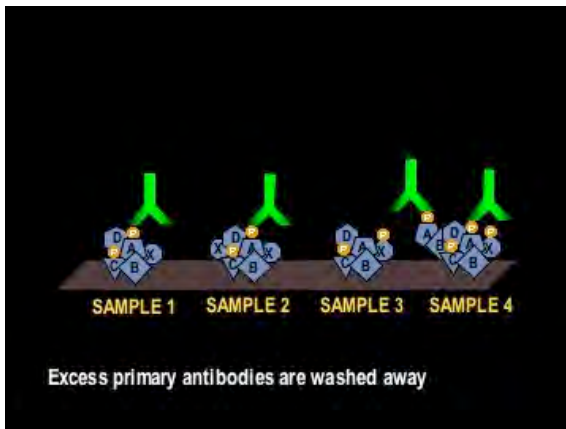
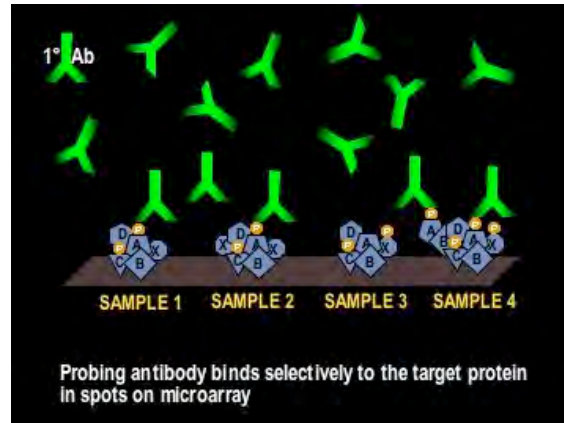
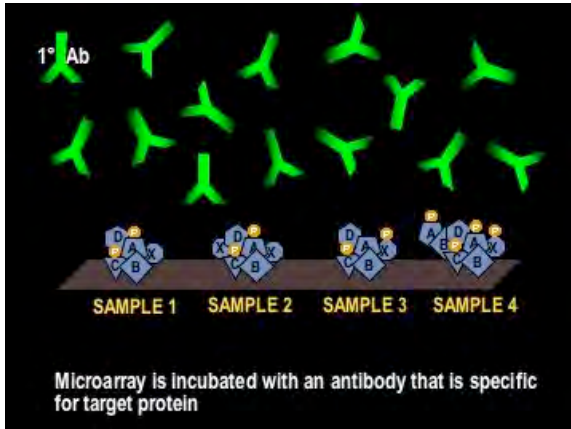
The following is a brief listing of the lysates from human tumour cell lines and tissues from other species that are currently available on the Kinex™ Reverse Lysate Microarray. Further details are provided in the Appendices A and B. The precise content on the Kinex™ Reverse Lysate Microarray is subject to change as we continually aim to improve and expand the range of cell and tissue lysates that it features.

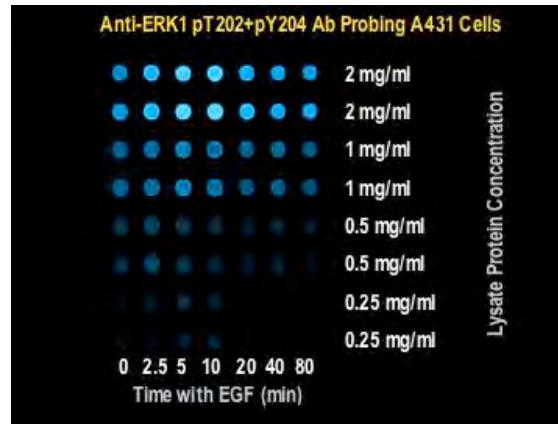
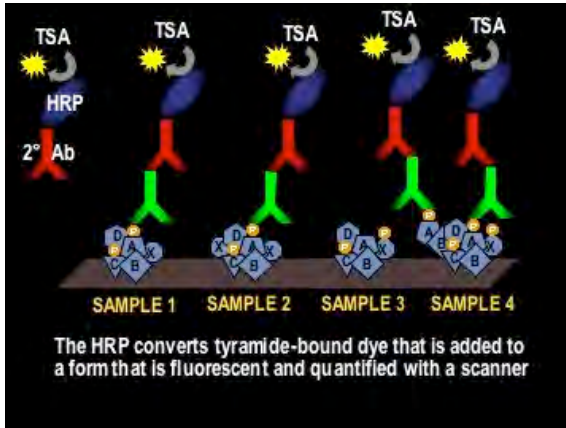
- A431 - Skin epidermoid carcinoma cells – treated with epidermal growth factor
- A549 - Lung carcinoma cells – treated with interferon-gamma
- HCT116 - Colon carcinoma cells – treated with nocoazole
- HEK 293 - Female fetal kidney cells – treated with anisomycin
- HeLa - Cervix epithelial adenocarcinoma cells – treated with tumour necrosis factor-alpha
- HepG2 - Liver carcinoma cells – treated with insulin
- HL-60 - Peripheral blood promyeloblasts – treated with staurosporine
- HUV-EC - Umbilical vein endothelial cells – treated with phorbol ester
- Jurkat - T cell leukemia cells – treated with phorbol ester
- MCF-7- Breast epithelial adenocarcinoma cells – treated with insulin
- PC-3 - Prostate adenocarcinoma cells – treated with taxol
- T98G - Brain glioblastoma cells – treated with platelet-derived growth factor

- Xenopus frog oocytes – treated with progesterone
- Rhesus male monkey organs and tissues
- Mouse male and female organs and tissues
- Rat male and female organs and tissues

The methodology behind the Kinex™ Reverse Lysate Microarray is illustrated in the following series of figures.







The bottom right figure provides a close up of a portion of the results from the scan of a Kinex™ Reverse Lysate Microarray that was probed with a phospho-site antibody that cross-reacts with the MAP kinases ERK1 and ERK2. These results are also graphically depicted in some of the exemplary figures that are provided at the back of this customer information package.

A large body of information and instruction follows in this customer information package. Your careful review of this package will ensure that we can provide to you the highest level of quality with our unique proteomics services. Eventually, we do plan to share the results of our Kinex™ Reverse Lysate Microarray analyses to other scientists in the KiNET DataBank. For these rights, we have discounted our standard charges by 21-50% with our Non-Confidential Pricing option. Our KiNET database with the results from many different antibodies probing the same cell and tissue lysates should also become useful for your own reference at a later date when you compare it with your own Kinex™ findings. Should you have any questions or concerns, we would be pleased to hear from you. Thank you in advance for letting Kinexus become one of your research partners.

2. CLIENT SUPPLIED CELL/TISSUE LYSATES

With our Custom Kinex™ Reverse Lysate Microarray service, clients can have microarrays printed that feature 250 or more lysates that they have provided. This could be extremely useful for analysis of large sets of clinical samples for promising biomarkers or for evaluating the effects of a wide range of drugs or hormones on cell lines. Due to the high set up costs with printing custom microarrays, clients must order a minimum of 20 slides for the Custom Kinex™ Reverse Lysate Microarray service. Clients should complete the Client-Supplied Lysate Description Form (KRLM-SDF-LY) provided in this client information package. If you do not wish to provide the requested information, then full confidential pricing charges will be applied. Note that due to the large number of lysates to be described, we request that clients provide the sample descriptions in an electronic format in either a Microsoft Word or Excel document, and as a printed copy with the completed KRLM-SDF-LY form. We request that the lysates are shipped frozen on dry ice to Kinexus at a concentration of approximately 5 mg/ml with a minimum of 40 µl volume.

3. CLIENT-SUPPLIED ANTIBODIES

With our Standard Kinex™ Reverse Lysate Microarray service, all of the cell lysates and a wide selection of possible probing antibodies are available as part of this very convenient and cost effective service. A complete listing of the antibodies available from Kinexus for probing the KRLM chips is available in MS-Excel format for downloading from the following URL on the Kinexus website: http://www.kinexus.ca/ourServices/microarrays/microarrays/antibody_microarrays.html. These antibodies are used in the creation of Kinex™ Antibody Microarray. We also provide the option for our clients to submit their own antibodies for use in our Standard and Custom Reverse Lysate Microarray Services in addition to those offered by Kinexus. In this event, clients should complete either the Client-Supplied Non-Confidential Antibody Description (NSDF-AB) or the Client-Supplied Confidential Antibody Description (CSDF-AB) forms provided in this information package. If you do not wish to provide the requested information on the NSDF-AB form, then full confidential pricing charges will be applied. We recognize that not all of the requested information about commercial antibodies may be available to our clients, so please provide as much information as you are able to qualify for Non-Confidential pricing.

For antibodies provided by the client, we would need the antibody as concentrated as possible, preferably at around 1 mg/ml. We require approximately 30 µg of most pan-specific antibodies, and about 10 µg of most phospho-site antibodies following their affinity purification. As there are large variations in the potency and specificity of antibodies, and every antibody is unique, and we may be able to perform the Kinex™ Reverse Lysate Microarray service with less antibody if it still works well at very high dilution by Western blotting.

4. SHIPPING OF CLIENT SUPPLIED CELL LYSATES AND ANTIBODIES.

We ask that the client supplied cell and tissue lysates are provided at a concentration of ~5 mg/ml with a volume of at least 40 µl in small Eppendorf vials. The vials should be clearly labeled with an indelible marker with a unique identification number (recorded in the Client-Supplied Lysate Description Form (KRLM-SDF-LY)), parafilmed, and then put into another support structure such as a styrofoam rack or plastic box that holds vials to provide extra protection during shipping. These lysates should be shipped frozen with plenty of dry ice in case the samples are held up at Canadian Customs. We have provided a commercial invoice statement for shipping cell lysates with this client information package.

We recommend that the client supplied antibodies are provided as concentrated as possible and within *screw cap* vials. The vials should be clearly labeled with an indelible marker with a unique identification number (recorded in the Client-Supplied Antibody Description forms (NSDF-AB or CSDF-AB)), parafilmed, and then put into another support structure such as a 50-ml conical or centrifuge tube to provide extra protection during shipping. It is not critical to ship the antibody preparation in a frozen state. We have provided two possible commercial invoice statements with this client information package in the event that you may wish to ship your antibodies frozen on dry ice instead.

5. SHIPPING INFORMATION

The aforementioned procedure has been designed to reduce the use of shipping materials and courier costs, and to ensure that your precious samples arrive in a safe and stable form at our laboratory facilities. Note that clients are responsible for payment of courier costs. The antibody vials should be sent to the address listed below by any express courier. We recommend Federal Express for shipments originating in North America, and World Express is the preferred courier choice outside of North America. Ship the antibodies to the following address:

Kinex™ Screening Services
Kinexus Bioinformatics Corporation
Suite 1, 8755 Ash Street
Vancouver, B.C. Canada V6P 6T3
Telephone: (604) 323-2547
Facsimile: (604) 323-2548
E-mail info@kinexus.ca

Please ensure 3 copies of a signed commercial invoice accompany your shipment which specifies your antibody samples are non hazardous and non infectious. Since the antibody and cell lysate samples are not for resale, the value of your shipment should be priced at approximately \$0.50 per antibody sample or per cell lysate sample in order to avoid paying additional duties and taxes on entry into Canada. **It is highly recommended that customers e-mail their courier airway bill number and the date of departure to info@kinexus.ca so we can track your shipment in transit and ensure it arrives in a timely manner.** We will send a confirmation e-mail once your shipment arrives at our facility.

6. PRICING INFORMATION

Kinexus offers the Kinex™ Reverse Lysate Microarray (KRLM) service at four different pricing levels depending on the level of confidentiality required for your samples and whether our Standard Kinex™ Reverse Lysate Microarray or a Custom Kinex™ Reverse Lysate Microarray is used. Our regular prices for the Standard Kinex™ Reverse Lysate Microarray service starts at US \$1698 per slide for each probing antibody selected for analysis if sample information is to remain fully confidential. At this pricing level, if the client provides their own antibody, only partial information about this antibody needs to be disclosed. To receive a 50% discount off the regular price, or pay \$849 per slide for each probing antibody, Kinexus must be allowed to include the results in its KiNET DataBank, which will permit third parties to access the data. If the client supplies their own antibody for probing the microarray, then they must also complete in full a Client-Supplied Non-Confidential Antibody Description Form (NSDF-AB)).

A minimum of 20 Custom Kinex™ Reverse Lysate Microarray analyses must be ordered for this custom service. Our regular prices for the Custom Kinex™ Reverse Lysate Microarray service starts at US \$349 per slide for each probing antibody selected for analysis if sample information is to remain fully confidential. At this pricing level, when the client provides their own lysates, only a sample identification code needs to be disclosed. To receive a 21% discount off the regular price, or pay \$275 per slide for each probing antibody, Kinexus must be allowed to include the results in its KiNET DataBank, which will permit third parties to access the data.

For volume discounts or quotations for large orders, please contact the Director of Sales & Marketing at 1-866-KINEXUS (or 1-604-323-2547) (and select option 2 on the telephone directory) or e-mail sales@kinexus.ca.

7. FOLLOW UP SERVICES

Kinexus offers a Western blotting follow-up service to cost-effectively validate key results from your Kinex™ Reverse Lysate Microarray analysis with the same cell and tissue lysates. Clients can utilize our Kinetworks™ Custom KCSS 1.0 (Multi-Sample) Protein Screen for 8 different cell or tissue lysates and choose up to 3 different antibodies (provided the molecular weights are significantly separated by SDS-PAGE). Once the results are confirmed by Western blotting, clients can correlate their data with hundreds of other data points from hundreds of different model systems using our KiNET Database. For presentation and publication purposes with the results from this microarray service, we can prepare individual bar graph figures as shown at the end of this package for US \$20 each or US \$300 for all of the data generated from your Kinex™ Reverse Lysate Microarray analysis. For more information about these services, please contact one of our customer service representatives at info@kinexus.ca.

8. FORMS TO BE COMPLETED

All of the forms necessary to use the Kinex™ Reverse Lysate Microarray (KRLM) services are provided in the Appendices section of this Customer Information Package. Fillable MS-Word versions of these forms are directly downloadable from the Kinexus website at http://www.kinexus.ca/ourServices/microarrays/microarrays/reverse_microarrays.html and by request by e-mail or by phone. Please contact our Technical Service Representatives by e-mail at info@kinexus.ca or by phone at 604-323-2547 Ext. 1 for all enquiries related to technical/research issues, work orders, service fees or request of fillable order forms.

All customers are required to complete the following forms for each order placed:

- A. Kinexus Service Agreement. Customers are required to complete and sign our standard Kinexus Services Agreement before their first order can be processed. Unless otherwise specified, this Agreement is valid for all future orders with a standard term of 15 years.
- B. Service Order Form (KRLM-SOF). The Service Order Form (SOF) allows us to track all of the various services to be used within an order.
- C. Service Identification Forms (KRLM-SSIF or KRLM-CSIF). The Service Identification Forms permit us to determine which Kinexus or client-supplied lysates and antibodies are to be used for probing the Kinex™ Reverse Lysate Microarray.

If customers wish to send their own cell and tissue lysates, they must also complete and submit the following forms:

- D. Client-Supplied Lysate Description Form (KRLM-SDF-LY). Full completion of this form is necessary for qualification for the Non-Confidential pricing discount. An electronic completed copy of the sample

information should be e-mailed to Kinexus at info@kinexus.ca and a printed hard copy should accompany the samples when shipped.

- E. Federal Express Airway Bill. For cell/tissue lysates to be delivered by Federal Express. Clients can pick any courier of their choice, but we recommend Federal Express within North America.
- F. Commercial Invoice. This is required for all customers located outside of Canada that send cell/tissue lysates.

If customers wish to send their own probing antibodies, they must also complete and submit the following forms:

- G. Client-Supplied Non-Confidential Antibody Description Form (NSDF-AB). Completion of this form is necessary for qualification for the Non-Confidential pricing discount. Alternatively, with Confidential pricing, clients should provide a completed Client-Supplied Confidential Antibody Description Form (CSDF-AB).
- H. Federal Express Airway Bill. For probing antibodies to be delivered by Federal Express. Clients can pick any courier of their choice, but we recommend Federal Express within North America.
- I. Commercial Invoice. This is required for all customers located outside of Canada that send probing antibodies.

All orders should have as a minimum: 1 Service Order Form and 1 Service Identification Form completed. A new Kinexus Services Agreement is not necessary if the client has previously placed an order with Kinexus and submitted a signed Kinexus Services Agreement at that time.

FOR ALL CUSTOMERS

A. Kinexus Service Agreement

A Kinexus Service Agreement is required to be signed before the first order can be processed.

- This Agreement is required to be signed and dated by an authorized representative, typically a Senior Officer, Senior Scientist, or Principal Investigator, before the first order can be processed, but does not have to be signed again for repeat orders. The Kinexus Service Agreement is typically valid for 15 years. If you require changes or modifications to be made to our standard Service Agreement, please email us at sales@kinexus.ca to request a Microsoft Word version of the document so your requested changes can be made directly into the agreement and emailed to us for our final approval.

B. Service Order Form (KRLM-SOF)

Please ensure:

- Shipping address and contact name and numbers are specified
- Billing information is completed as outlined in Section D on the Service Identification Form (KRLM-SSIF or KRLM-SSIF)
- Any promotional vouchers or quotations are listed in the billing sections
- Include a Purchase Order, Visa or MasterCard number for payment
- The form is signed and dated

C. Service Identification Forms (KRLM-SSIF and KRLM-CSIF)

- Use the KRLM-SSIF form for our Standard Kinex™ Reverse Lysate Microarray Service that uses Kinexus-supplied cell and tissue lysates. Use the KRLM-CSIF form for our Custom Kinex™ Reverse Lysate Microarray Service that uses client-supplied cell and tissue lysates.

For each antibody to be used for probing, please ensure the following:

- In Section A, the customer must assign a unique Client Screen Identification Name to correlate the probing antibody to be used for each microarray
- In Section B, the various probing antibodies to be used are specified
- For Section C, the probing antibodies that you may wish to supply are identified by completion of a Client-Supplied Non-Confidential Antibody Description Form (NSDF-AB) or a Client-Supplied Confidential Antibody Description Form (CSDF-AB). Make sure that the Client Screen ID Name in Box A of these forms, matched the Client Screen ID Name in Box A of the KRLM-SSIF or KRLM-CSIF form
- In Section D, the level of confidentiality is indicated for correct pricing
- The form is certified correct and signed and dated

FOR ALL CUSTOMERS SENDING THEIR OWN CELL/TISSUE LYSATES

D. Client-Supplied Lysate Description Form (KRLM-SDF-LY)

For submitted cell and/or tissue lysates for use in the Custom Kinex™ Reverse Lysate Microarray Service please ensure the following:

- Each lysate sample tube is labeled and properly identified on the pages with sample information attached to the KRLM-SDF-LY form, including a “Lysate Code”, the protein concentration and volume of each lysate
- For Non-confidential pricing, the client must also provide the addition requested information on the KRLM-SDF-LY form
- In Section A, the customer must enter the unique Client Screen Identification Name from Box A of the Service Identification Form (KRLM-CSIF) to match the antibodies to be used for probing the set of 20 or more printed Custom Kinex™ Reverse Lysate Microarrays
- The form is certified correct and signed and dated

FOR ALL CUSTOMERS SENDING THEIR OWN ANTIBODIES

E. Client-Supplied Antibody Description Forms (NSDF-AB and CSDF-AB)

For submitted antibodies, please ensure the following:

- Each antibody sample tube is labeled and properly identified on the form in Section B, including final concentration and volume

- In Section A, the customer must enter the unique Client Screen Identification Name from Box A of the Service Identification Form (KRLM-SSIF or KRLM-CSIF) to match the antibody to the particular Kinex™ Reverse Lysate Microarray to be used for probing with this antibody.
- The form is certified correct and signed and dated
-
- Note that the information provided on the KRLM-SDF-LY and NSDF-AB forms will eventually become available to thousands of other scientists in the future with the non-confidentiality pricing option. In the spirit of collegiality, please be as accurate as possible in completing these information forms in order to not handicap their research efforts should they desire to follow up on your Kinex™ Reverse Lysate Microarray results.

F. Airway bill for Federal Express or any other courier

Complete the airway bill and specify:

- Priority overnight delivery
- Bill transportation charges to your institute
- It is not critical to send your antibodies in a frozen state, but it is critical for your cell/tissue lysates for the Custom Kinex™ Reverse Lysate Microarray. However, if you wish to send your antibody frozen please provide sufficient dry ice to last several days into a Styrofoam shipping container.
Seal the edges of the Styrofoam container with tape to preserve dry ice longer
Dry ice is a “*hazardous*” item, so ensure proper labels are attached to the outside of the box;
- Do not specify Saturday delivery or hold at courier location
- For Federal Express shipments telephone 1-800-GO-FEDEX or visit them on-line at www.fedex.com or www.fedex.ca to schedule a pick up or complete your forms
- For shipments coming from within Canada or the United States, please ship any day from Monday to Wednesday. Do not ship on a Thursday or Friday.
- For international shipments coming from outside of North America, the best day to ship is on a Monday to ensure arrival in Canada for delivery later the same week
- It is recommended that customers e-mail the date of your shipment and the courier airway bill number with number of samples to Kinexus at info@kinexus.ca to ensure we can track your package should it get held up in Canadian Customs
- For any customer located outside of Canada, 3 copies of a commercial invoice is required to accompany your shipment (see below)

FOR U.S AND INTERNATIONAL CUSTOMER ONLY

G. Commercial Invoice (not required by Canadian customers)

Please complete the attached commercial invoice with the following information:

- Date of exportation

- Shipper/Exporter name, address, phone number
- Country of export/Country of origin
- Name of courier and the airway bill number
- Number, type and total weight of package(s)
- Total declared value of shipment (number of samples x \$0.50 per sample) and please specify currency
- Date, name, signature, and title of authorized person

Include three (3) copies of the commercial invoice with the airway bill

NOTE: Do not change the value of your shipment to more than \$1.00 per sample as this will prompt the custom brokers to charge Kinexus with a duty and GST fee on your package. Since the cell lysate and antibody samples are processed internally and not returned to the customer or resold, there is no real commercial value.

The international air waybill is required for all international shipments between Canada and the rest of the world. It is also your customs declaration, which can possibly be used to clear your shipment through customs at the destination. The customs clearance process begins with the description of the air waybill. If the description is too vague or missing, customs authorities may select the shipment for further inspection. All customs paperwork, such as the commercial invoice, must have detailed commodity descriptions. A detailed description on the air waybill and other customs documentation will help speed up the clearance time and reduce your delivery time. In the event that Kinexus must go to a Canada Customs facility to claim the package of samples for client order due to inadequate completion of the commercial invoice, additional charges may apply.

Appendix A. Cell lysates on the Kinex™ Reverse Lysate Microarray Version 8JN18

Cell Line	Organ/Tissue	Name	Gender	Treatment	Comments
A431	Skin	Human	Female	EGF: 100 ng/ml; 0-40 min	Skin epidermoid carcinoma from 85 year old female [ATCC# CRL-1555] (EGF=epidermal growth factor)
				EGF: 0- 800 ng/ml; 5 min	
A549	Lung	Human	Male	IFN gamma: 50 ng/ml; 0-80 min	Lung carcinoma from 58 year old male [ATCC# CCL-185] (IFN=interferon)
				IFN gamma: 0-400 ng/ml; 80 min	
HCT116	Colon	Human	Male	Nocodazole: 100 ng/ml; 0-48 hr Nocodazole: 0-800 ng/ml; 16 hr	Colon carcinoma from adult male [ATCC# CCL-247]
HEK 293	Kidney	Human	Female	Anisomycin: 10 µg/ml; 0-80 min	Female fetal kidney cells transformed with adenovirus 5 [ATCC# CRL-1573]
				Anisomycin: 0-40 µg/ml; 5 min	
HeLa	Cervix	Human	Female	TNFalpha: 2 ng/ml; 0- 80 min	Cervix epithelial adenocarcinoma from 31 year old female [ATCC# CCL-2] (TNF=tumour necrosis factor)
				TNFalpha: 0-16 ng/ml; 20 min	
HepG2	Liver	Human	Male	Insulin: 10 µg/ml; 0-80 min	Liver carcinoma from 15 year old male [ATCC# HB-8065]
				Insulin: 0-80 µg/ml; 5 min	
HL-60	Blood	Human	Female	Staurosporine: 500 nM; 0-80 min	Peripheral blood promyeloblasts from 36 year old female [ATCC# CCL-240]
				Staurosporine: 0-500 nM; 2 hr	
HU-VEC	Umbilical Cord	Human	Female	PMA: 0-80 min, 10 ng/ml	Umbilical vein endothelial cells from normal adult female [ATCC# CRL-1730] (PMA=phorbol 12-myristate 13-acetate)
				PMA: 0-40 ng/ml; 40 min	
Jurkat	Blood T cell	Human	Male	PMA: 100 ng/ml; 0-80 min	T cell leukemia from 14 year old male [ATCC# TIB-152] (PMA=phorbol 12-myristate 13-acetate)
				PMA: 0-400 ng/ml; 10 min	
MCF7	Breast	Human	Female	Insulin: 10 µg/ml; 0-80 min	Breast epithelial adenocarcinoma from 69 year old female [ATCC# HTB-22]
				Insulin: 0-80 µg/ml; 2.5 min	
PC3	Prostate	Human	Male	Taxol: 10 nM; 0-48 hr	Prostate adenocarcinoma from bone of 62 year old male [ATCC# CRL-1435]
				Taxol: 1-40 nM; 24 hr	
T98G	Brain	Human	Male	PDGF: 50 ng/ml; 0-80 min	Brain glioblastoma from 61 year old male [ATCC# CRL-1690] (PDGF=platelet-derived growth factor)
				PDGF: 0-200 ng/ml; 5 min	
Oocytes	Ovary	Frog	Female	Progesterone; 10 µg/ml; 0-9 h	Individual single cells at various stages of meiotic maturation



Suite 1, 8755 Ash Street
Vancouver, B.C
Canada V6P 6T3

Phone: 1-866-KINEXUS (toll free North America)

Phone: 1-604-323-2547

Facsimile: 1-604-323-2548

E-Mail: info@kinexus.ca

Internet: www.kinexus.ca

Release: June 18, 2008

Appendix B Tissue lysates on the Kinex™ Reverse Lysate Microarray Version 8JN18

Organ/Tissue	Animal	Species	Gender	Code	Treatment	Comments
Brain	Mouse	Mus musculus	Female	MFT300	None	Pooled from 3-4 animals
			Male	MMT310		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT001		Pooled from 4 animals
			Male	RMT011		Pooled from 8 animals
Fat pads	Monkey	Macaca mulatta	Male	SMT045	None	From 1 animal
Heart	Monkey	Macaca mulatta	Male	SMT035	None	From 1 animal
	Mouse	Mus musculus	Female	MFT301		Pooled from 3-4 animals
			Male	MMT311		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT002		Pooled from 4 animals
Male			RMT012	Pooled from 8 animals		
Kidney	Monkey	Macaca mulatta	Male	SMT036	None	From 1 animal
	Mouse	Mus musculus	Female	MFT302		Pooled from 3-4 animals
			Male	MMT312		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT003		Pooled from 4 animals
Male			RMT013	Pooled from 8 animals		
Liver	Monkey	Macaca mulatta	Male	SMT037	None	From 1 animal
	Mouse	Mus musculus	Female	MFT303		Pooled from 3-4 animals
			Male	MMT313		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT004		Pooled from 4 animals
Male			RMT014	Pooled from 8 animals		
Lung	Monkey	Macaca mulatta	Male	SMT038	None	From 1 animal
	Mouse	Mus musculus	Female	MFT304		Pooled from 3-4 animals
			Male	MMT314		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT005		Pooled from 4 animals
Male			RMT015	Pooled from 8 animals		
Ovary	Mouse	Mus musculus	Female	MFT026	None	Pooled from 3-4 animals
	Rat	Rattus norvegicus	Female	RFT007		Pooled from 4 animals
Pancreas	Monkey	Macaca mulatta	Male	SMT040	None	From 1 animal
	Mouse	Mus musculus	Female	MFT0*1		Pooled from 3 animals
			Male	MMT0*1		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT006		Pooled from 4 animals
Male			RMT016	Pooled from 8 animals		
Seminal vesicle	Mouse	Mus musculus	Male	MMT0*4	None	From 3 animals
Skeletal muscle	Mouse	Mus musculus	Female	MFT305	None	Pooled from 3-4 animals
			Male	MMT315		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT008		Pooled from 4 animals
			Male	RMT018		Pooled from 8 animals
Small intestine	Monkey	Macaca mulatta	Male	SMT046	None	From 1 animal
Spinal cord	Monkey	Macaca mulatta	Male	SMT042	None	From 1 animal
Spleen	Monkey	Macaca mulatta	Male	SMT043	None	From 1 animal
	Mouse	Mus musculus	Female	MFT307		Pooled from 3-4 animals
			Male	MMT317		Pooled from 3 animals
	Rat	Rattus norvegicus	Female	RFT009		Pooled from 4 animals
Male			RMT019	Pooled from 8 animals		
Stomach	Monkey	Macaca mulatta	Male	SMT047	None	From 1 animal
	Mouse	Mus musculus	Female	MFT308		Pooled from 3-4 animals
Male			MMT318	Pooled from 3 animals		
Testes	Monkey	Macaca mulatta	Male	SMT039	None	From 1 animal
	Mouse	Mus musculus	Male	MMT0*2		From 3 animals
	Rat	Rattus norvegicus	Male	RMT017		Pooled from 8 animals
Thymus	Rat	Rattus norvegicus	Female	RFT010	None	Pooled from 4 animals
			Male	RMT020		Pooled from 8 animals
Urinary bladder	Monkey	Macaca mulatta	Male	SMT034	None	From 1 animal
	Mouse	Mus musculus	Female	MFT0*2		From 3 animals
Male			MMT0*3	From 3 animals		
Uterus	Mouse	Mus musculus	Female	MFT0*3	None	From 3 animals



Suite 1, 8755 Ash Street
 Vancouver, B.C
 Canada V6P 6T3

Phone: 1-866-KINEXUS (toll free North America)
 Phone: 1-604-323-2547
 Facsimile: 1-604-323-2548
 E-Mail: info@kinexus.ca
 Internet: www.kinexus.ca

Release: June 18, 2008



KINEXUS

Form: KRLM-SSIF

KINEX™ REVERSE LYSATE MICROARRAY STANDARD SERVICE IDENTIFICATION FORM

Subject to terms of the Kinexus Services Agreement

KINEXUS ORDER NUMBER

NAME: _____ COMPANY/INSTITUTE: _____

(Authorized Representative or Principal Investigator)

KINEX™ STANDARD REVERSE LYSATE SCREENING SERVICE REQUESTED: (WITH KINEXUS REVERSE LYSATE MICROARRAY AND EITHER KINEXUS ANTIBODIES OR CLIENT-SUPPLIED ANTIBODIES)

Use this form to order the Standard Kinex™ Reverse Lysate Microarray screening service with a chip that features pre-made cell lysates offered by Kinexus. Please check the appropriate tick boxes. If you need assistance completing this form, please contact a technical service representative by calling toll free in North America 1-866-KINEXUS (866-546-3987) or by email at info@kinexus.ca. An electronic fillable MS-Word version of this form can be downloaded from the Kinexus website at www.kinexus.ca or supplied upon request.

<input type="checkbox"/> STANDARD SERVICE REQUESTED: Standard KRLM Standard Kinex™ Reverse Lysate Microarray (~250 Kinexus lysates) probed with 1 antibody	KINEXUS ID NUMBER <i>(Bar Code Identification Number)</i> For Kinexus Internal Use Only.	A. CLIENT SCREEN ID NAME: Customer ID: _____ <i>Provide ID name of your choice for your reference and for use in Box A of the "Client-Supplied Antibody Description Form (NSDF-AB or CSDF-AB)."</i>																																												
B. KINEX™ REVERSE LYSATE ANTIBODY SELECTION: <i>Clients can select one Kinexus antibody per microarray analysis from an MS-Excel spreadsheet that is downloadable from the bottom of the Our Services > Kinex™ Microarrays > Antibody Microarrays webpage at www.kinexus.ca. Enter the I.D. code for the antibody from this spreadsheet. Complete one line below for each antibody to be used in probing each KRLM chip; each antibody requires a separate microarray. Provide the short name for the antibody target and If the requested antibody is phospho-site specific, please indicate the human phospho-site (e.g. GSK3a Y279). See Section C if the probing antibody is to be supplied by the client. For more antibodies to be tested, use additional KRLM-SSIF forms.</i>		C. CLIENT ANTIBODY IDENTIFICATION: <i>For each client-supplied antibody, please complete a "Client-Supplied Antibody Description Form" (NSDF-AB or CSDF-AB) depending on the required level of confidentiality.</i>																																												
<table border="1"> <thead> <tr> <th></th> <th>Short Name of Ab Target</th> <th>Kinex Antibody Code (from Excel Spreadsheet*)</th> <th>or Client Antibody Code (from NSDF-AB or CSDF-AB Form)</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td>1.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>2.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>3.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>4.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>5.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>6.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>7.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>8.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>9.</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/></td><td>10.</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p>* The Kinexus antibody codes are available on a MS-Excel spreadsheet that is downloadable from the Kinexus website. These antibodies are used in the creation of Kinex™ Antibody Microarray. The URL is http://www.kinexus.ca/ourServices/microarrays/microarrays/antibody_microarrays.html.</p>			Short Name of Ab Target	Kinex Antibody Code (from Excel Spreadsheet*)	or Client Antibody Code (from NSDF-AB or CSDF-AB Form)	<input type="checkbox"/>	1.	_____	_____	<input type="checkbox"/>	2.	_____	_____	<input type="checkbox"/>	3.	_____	_____	<input type="checkbox"/>	4.	_____	_____	<input type="checkbox"/>	5.	_____	_____	<input type="checkbox"/>	6.	_____	_____	<input type="checkbox"/>	7.	_____	_____	<input type="checkbox"/>	8.	_____	_____	<input type="checkbox"/>	9.	_____	_____	<input type="checkbox"/>	10.	_____	_____	D. PRICING: <input type="checkbox"/> Non-Confidential, probed with 1 antibody \$849 US <input type="checkbox"/> Confidential, probed with 1 antibody \$1,698 US Use this standard pricing information for completion and submission of Service Order Form KRLM-SOF. Apply any special promotional discounts on the KRLM-SOF form. Use the Kinexus Custom Graphics Services to obtain bar graphs of the data generated with the Kinex™ Reverse Lysate Microarray; \$20 US per figure or \$300 US for all data graphed (~30 figures).
	Short Name of Ab Target	Kinex Antibody Code (from Excel Spreadsheet*)	or Client Antibody Code (from NSDF-AB or CSDF-AB Form)																																											
<input type="checkbox"/>	1.	_____	_____																																											
<input type="checkbox"/>	2.	_____	_____																																											
<input type="checkbox"/>	3.	_____	_____																																											
<input type="checkbox"/>	4.	_____	_____																																											
<input type="checkbox"/>	5.	_____	_____																																											
<input type="checkbox"/>	6.	_____	_____																																											
<input type="checkbox"/>	7.	_____	_____																																											
<input type="checkbox"/>	8.	_____	_____																																											
<input type="checkbox"/>	9.	_____	_____																																											
<input type="checkbox"/>	10.	_____	_____																																											

Name of person completing this form _____ Signature _____ Date (m/d/y) _____



Form: **KRLM-CSIF**

**KINEX™ REVERSE LYSATE MICROARRAY
CUSTOM SERVICE IDENTIFICATION FORM**

Subject to terms of the Kinexus Proteomics Services Agreement

KINEXUS ORDER NUMBER

NAME: _____ **COMPANY/INSTITUTE:** _____
(Authorized Representative or Principal Investigator)

KINEX™ CUSTOM REVERSE LYSATE SCREENING SERVICE REQUESTED: (WITH REVERSE LYSATE MICROARRAY PRINTED WITH CLIENT-SUPPLIED CELL/TISSUE LYSATES AND EITHER KINEXUS ANTIBODIES OR CLIENT-SUPPLIED ANTIBODIES)

Use this form to order the Custom Kinex™ Reverse Lysate Microarray screening service with a minimum of 20 identically printed chips that features cell or tissue lysates that are supplied by the client. Please check the appropriate tick boxes. If you need assistance completing this form, please contact a technical service representative by calling toll free in North America 1-866-KINEXUS (866-546-3987) or by email at info@kinexus.ca. An electronic fillable MS-Word version of this form can be downloaded from the Kinexus website at www.kinexus.ca or supplied upon request.

<input type="checkbox"/> CUSTOM SERVICE REQUESTED: Custom KRLM Custom Kinex™ Reverse Lysate Microarray (~250 client lysates) probed with 1 antibody	KINEXUS ID NUMBER <i>(Bar Code Identification Number)</i> For Kinexus Internal Use Only.	A. CLIENT SCREEN ID NAME: Customer ID: _____ <i>Provide ID name of your choice for your reference and for use in Box A of the "Client-Supplied Antibody Description Forms" NSDF-AB or CSDF-AB or the "Client-Supplied Lysate Description Form" (KRLM-SDF-LY).</i>																																																																																																																																		
B. KINEX™ REVERSE LYSATE ANTIBODY SELECTION: <i>Clients can select one Kinexus antibody per microarray analysis from an MS-Excel spreadsheet that is downloadable from the bottom of the Our Services > Kinex™ Microarrays > Antibody Microarrays webpage at www.kinexus.ca. Enter the I.D. code for the antibody from this spreadsheet. Complete one line below for each antibody to be used in probing each KRLM chip. Note that each antibody requires a separate microarray and for the Custom Reverse Lysate Microarray service a minimum of 20 chips must be ordered. Provide the short name for the antibody target and if the requested antibody is phospho-site specific, please indicate the human phospho-site (e.g. GSK3a Y279). See Section C if the probing antibody is to be supplied by the client. For more antibodies to be tested, use additional KRLM-CSIF forms.</i>		C. CLIENT ANTIBODY IDENTIFICATION: <i>For each client-supplied antibody, please complete a "Client-Supplied Antibody Description Form" (NSDF-AB or CSDF-AB) depending on requested level of confidentiality.</i>																																																																																																																																		
<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;"></th> <th style="width:30%; text-align: center;">Short Name of Ab Target</th> <th style="width:20%; text-align: center;">Kinex Antibody Code <i>(from Excel Spreadsheet*)</i></th> <th style="width:10%; text-align: center;">or</th> <th style="width:30%; text-align: center;">Client Antibody Code <i>(from NSDF-AB or CSDF-AB Form)</i></th> </tr> </thead> <tbody> <tr><td>1.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>2.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>3.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>4.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>5.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>6.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>7.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>8.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>9.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>10.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>11.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>12.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>13.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>14.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>15.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>16.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>17.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>18.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>19.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>20.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>21.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>22.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>23.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>24.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> <tr><td>25.</td><td>_____</td><td>_____</td><td></td><td>_____</td></tr> </tbody> </table>			Short Name of Ab Target	Kinex Antibody Code <i>(from Excel Spreadsheet*)</i>	or	Client Antibody Code <i>(from NSDF-AB or CSDF-AB Form)</i>	1.	_____	_____		_____	2.	_____	_____		_____	3.	_____	_____		_____	4.	_____	_____		_____	5.	_____	_____		_____	6.	_____	_____		_____	7.	_____	_____		_____	8.	_____	_____		_____	9.	_____	_____		_____	10.	_____	_____		_____	11.	_____	_____		_____	12.	_____	_____		_____	13.	_____	_____		_____	14.	_____	_____		_____	15.	_____	_____		_____	16.	_____	_____		_____	17.	_____	_____		_____	18.	_____	_____		_____	19.	_____	_____		_____	20.	_____	_____		_____	21.	_____	_____		_____	22.	_____	_____		_____	23.	_____	_____		_____	24.	_____	_____		_____	25.	_____	_____		_____	D. CLIENT LYSATE IDENTIFICATION: <i>For client-supplied cell and tissue lysates, please complete a "Client-Supplied Lysate Description Form" (KRLM-SDF-LY).</i>
	Short Name of Ab Target	Kinex Antibody Code <i>(from Excel Spreadsheet*)</i>	or	Client Antibody Code <i>(from NSDF-AB or CSDF-AB Form)</i>																																																																																																																																
1.	_____	_____		_____																																																																																																																																
2.	_____	_____		_____																																																																																																																																
3.	_____	_____		_____																																																																																																																																
4.	_____	_____		_____																																																																																																																																
5.	_____	_____		_____																																																																																																																																
6.	_____	_____		_____																																																																																																																																
7.	_____	_____		_____																																																																																																																																
8.	_____	_____		_____																																																																																																																																
9.	_____	_____		_____																																																																																																																																
10.	_____	_____		_____																																																																																																																																
11.	_____	_____		_____																																																																																																																																
12.	_____	_____		_____																																																																																																																																
13.	_____	_____		_____																																																																																																																																
14.	_____	_____		_____																																																																																																																																
15.	_____	_____		_____																																																																																																																																
16.	_____	_____		_____																																																																																																																																
17.	_____	_____		_____																																																																																																																																
18.	_____	_____		_____																																																																																																																																
19.	_____	_____		_____																																																																																																																																
20.	_____	_____		_____																																																																																																																																
21.	_____	_____		_____																																																																																																																																
22.	_____	_____		_____																																																																																																																																
23.	_____	_____		_____																																																																																																																																
24.	_____	_____		_____																																																																																																																																
25.	_____	_____		_____																																																																																																																																
<p>E. PRICING:</p> <input type="checkbox"/> Non-Confidential, probed with 1 antibody \$275 US <input type="checkbox"/> Confidential, probed with 1 antibody \$349 US		<p>Use this custom pricing information for completion and submission of Service Order Form KRLM-SOF. Apply any special promotional discounts on the KRLM-SOF form.</p>																																																																																																																																		
<p><small>* The Kinexus antibody codes are available on a MS-Excel spreadsheet that is downloadable from the Kinexus website. These antibodies are used in the creation of Kinex™ Antibody Microarray. The URL is http://www.kinexus.ca/ourServices/microarrays/microarrays/antibody_microarrays.html.</small></p>																																																																																																																																				

Name of person completing this form *Signature* *Date (m/d/y)*



KINEXUS

Form: NSDF-AB

FOR ANTIBODIES **NON-CONFIDENTIAL** CLIENT-SUPPLIED SAMPLE DESCRIPTION FORM

Subject to terms of the Kinexus Proteomics Services Agreement

KINEXUS ORDER NUMBER

NAME: _____ COMPANY/INSTITUTE: _____
(Authorized Representative or Principal Investigator)

Non-Confidential Service Requested and Antibody Sample Details:

Please refer to the Customer Information Package for the particular Kinexus proteomics service that you are requesting for details on how to prepare and ship your antibodies to Kinexus for testing. For Non-Confidential pricing you must fully describe the nature of the probing antibodies (including immunogen sequence, the animal species in which the antibody was produced as well as manufacturer's name and catalogue number if it is commercially sourced). Please note that in the event that clients do not wish to disclose the source or nature of the antibodies that they are providing, then Confidential Pricing must apply. Clients must still complete Sections A to C for Confidential analyses. Please check the appropriate tick boxes. If you need assistance completing this form, contact a technical service representative by calling toll free in North America 1-866-KINEXUS (866-546-3987) or by email at info@kinexus.ca.

Form section 1: A. CLIENT SCREEN ID NAME + KINEXUS SERVICES NAME; B. ANTIBODY IDENTIFICATION; C. SPECIES OF ANTIBODY ORIGIN AND TYPE; D. COMMERCIAL SOURCE OF ANTIBODY; E. IMMUNOGEN INFORMATION; F. AMINO ACID SEQUENCE OF IMMUNOGEN

Form section 2: A. CLIENT SCREEN ID NAME; B. ANTIBODY IDENTIFICATION; C. SPECIES OF ANTIBODY ORIGIN AND TYPE; D. COMMERCIAL SOURCE OF ANTIBODY; E. IMMUNOGEN INFORMATION; F. AMINO ACID SEQUENCE OF IMMUNOGEN

I hereby certify that all of the information about antibodies that I provided in this order is correct and accurate to the best of my knowledge.

Name of person completing this form Signature Date (y/m/d)



KINEXUS

Form: CSDF-AB

FOR ANTIBODIES

CLIENT-SUPPLIED
CONFIDENTIAL SAMPLE DESCRIPTION FORM

Subject to terms of the Kinexus Proteomics Services Agreement

KINEXUS ORDER NUMBER

NAME: COMPANY/INSTITUTE: (Authorized Representative or Principal Investigator)

Confidential Service Requested and Antibody Sample Details:

Please refer to the Customer Information Package for the particular Kinexus proteomics service that you are requesting for details on how to prepare and ship your antibodies to Kinexus for testing. For Confidential pricing you are not required to provide immunogen sequence, and manufacturer's name and catalogue number if it is commercially sourced. Clients must complete Sections A to C for Confidential analyses. Please check the appropriate tick boxes. If you need assistance completing this form, contact a technical service representative by calling toll free in North America 1-866-KINEXUS (866-546-3987) or by email at info@kinexus.ca.

Form section 1: A. CLIENT SCREEN ID NAME + KINEXUS SERVICES NAME; B. ANTIBODY IDENTIFICATION; C. SPECIES OF ANTIBODY ORIGIN AND TYPE; D. COMMERCIAL SOURCE OF ANTIBODY; E. IMMUNOGEN INFORMATION; F. AMINO ACID SEQUENCE OF IMMUNOGEN

Form section 2: A. CLIENT SCREEN ID NAME + KINEXUS SERVICES NAME; B. ANTIBODY IDENTIFICATION; C. SPECIES OF ANTIBODY ORIGIN AND TYPE; D. COMMERCIAL SOURCE OF ANTIBODY; E. IMMUNOGEN INFORMATION; F. AMINO ACID SEQUENCE OF IMMUNOGEN

I hereby certify that all of the information about antibodies that I provided in this order is correct and accurate to the best of my knowledge.

Name of person completing this form Signature Date (v/m/d)

COMMERCIAL INVOICE

DATE OF EXPORTATION	EXPORT REFERENCES
SHIPPER/EXPORTER	CONSIGNEE Kinexus Bioinformatics Corporation Suite 1 8755 Ash Street Vancouver, B.C. Canada V6P 6T3 Telephone: (604) 323-2547 Facsimile: (604) 232-2548 Email: info@kinexus.ca
COUNTRY OF EXPORT	TERMS OF SALE Not for resale, sample for analysis
COUNTRY OF ORIGIN	PURPOSE Research and development
COUNTRY OF ULTIMATE DESTINATION Canada	EXPORTING CARRIER
INTERNATIONAL AIR WAYBILL NUMBER	
Courier Name:	Number:

NO. OF PKGS	TYPE OF PACKAGING	QUANTITY OF SAMPLES	COMPLETE AND ACCURATE COMMODITY DESCRIPTION	UNIT VALUE
	<input type="checkbox"/> FedEx Letter <input type="checkbox"/> FedEx Pak <input type="checkbox"/> Box <input type="checkbox"/> Other	<i>Total number of 1.5 ml Eppendorf tubes:</i>	Non hazardous, non infectious protein for research and development diagnostic purposes. Samples are not for resale and there is no commercial value. Samples are packaged on Dry Ice, Class 9, UN 1845, Group 3 (____ X ____ kgs).	\$1.00 <i>per sample</i>
TOTAL NO. OF PACKAGES		TOTAL WEIGHT OF PACKAGES		TOTAL DECLARED VALUE
				\$

These commodities were exported from the Country indicated above in accordance with the Export Administration Regulations and are licensed for the ultimate designation shown. It is hereby certified that this commercial invoice shows the actual price of the goods described, that no other invoice has been or will be issued for these goods, and that all particulars are true and correct.

SIGNATURE AND STATUS OF AUTHORIZED PERSON

Print Name	Title
Authorized Signature	Date (month/day/year)

INCLUDE THREE (3) COPIES OF THIS INVOICE WITH YOUR SHIPMENT

COMMERCIAL INVOICE

DATE OF EXPORTATION	EXPORT REFERENCES <i>(not required)</i>
SHIPPER/EXPORTER	CONSIGNEE Kinexus Bioinformatics Corporation Suite 1, 8755 Ash Street Vancouver, B.C. Canada V6P 6T3 Telephone: (604) 323-2547 Ext. 1 or 10 Facsimile: (604) 323-2548 Email: info@kinexus.ca
COUNTRY OF EXPORT	TERMS OF SALE Not for resale, sample for analysis
COUNTRY OF ORIGIN	PURPOSE Research and development
COUNTRY OF ULTIMATE DESTINATION Canada	EXPORTING CARRIER
INTERNATIONAL AIR WAYBILL NUMBER Courier Number:	

NO. OF PKGS	TYPE OF PACKAGING	QUANTITY OF SAMPLES	COMPLETE AND ACCURATE COMMODITY DESCRIPTION	UNIT VALUE
	<input type="checkbox"/> FedEx Letter <input type="checkbox"/> FedEx Pak <input type="checkbox"/> Box <input type="checkbox"/> Other	<i>Total number of 1.5 ml Eppendorf tubes:</i>	Non hazardous, non infectious protein samples packaged in 1.5 ml tubes for research and development testing purposes. Samples are not for resale and there is no commercial value.	\$1.00 <i>per sample</i>
TOTAL NO. OF PACKAGES		TOTAL WEIGHT OF PACKAGES		TOTAL DECLARED VALUE \$

These commodities were exported from the Country indicated above in accordance with the Export Administration Regulations and are licensed for the ultimate designation shown. It is hereby certified that this commercial invoice shows the actual price of the goods described, that no other invoice has been or will be issued for these goods, and that all particulars are true and correct.

SIGNATURE AND STATUS OF AUTHORIZED PERSON

<i>Print Name</i>	<i>Title</i>
<i>Authorized Signature</i>	<i>Date (month/day/year)</i>

INCLUDE THREE (3) COPIES OF THIS INVOICE WITH YOUR SHIPMENT



PROTEOMICS SERVICES AGREEMENT

SERVICE AGREEMENT NO.

This Agreement is entered into effective as of the Effective Date by and between Kinexus Bioinformatics Corporation (“**Kinexus**”), a Canadian corporation with a principal place of business at Suite 1, 8755 Ash Street, Vancouver, British Columbia, Canada, V6P 6T3 **AND** the corporation or other entity (“**Customer**”) having the following name and business or institution address: _____

RECITALS

WHEREAS Kinexus is a bioinformatics company employing proprietary proteomics and bioinformatics services to create and interpret data to map protein signalling networks and compile databases with this knowledge to enable disease biomarker and therapeutics discovery.

WHEREAS the Customer desires to have Kinexus perform standard and/or customized proteomics services with materials and/or information provided by the Customer.

WHEREAS Kinexus is willing to provide these proteomics services under the terms and conditions set forth herein.

THEREFORE, in consideration of the premises and covenants and agreements contained herein, and other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, Kinexus and the Customer agree as follows:

1. DEFINITIONS

1.1 "Academic Collaborator" means a principal investigator, employed at a university or other not-for-profit academic research institution.

1.2 "Affiliate" means any corporation or other entity that directly or indirectly controls, is controlled by or is under common control with a party to this Agreement. A corporation or other entity shall be regarded as in control of another corporation or entity if it owns or directly or indirectly controls more than fifty percent (50%) of the outstanding voting stock or other ownership interest of the other corporation or entity.

1.3 "Corporate Partner" means any Third Party which enters into an agreement with the Customer or its Affiliates involving the grant to such Third Party of rights for the development or commercialization of a product that was discovered, identified, selected, characterized or determined to have therapeutic or diagnostic use through use of the Proteomics Analyses provided to the Customer pursuant to this Agreement.

1.4 "Confidential Information" means any information or data received by a party (the “Receiving Party”) from the other party (the “Disclosing Party”) in connection with the performance of this Agreement that, if

disclosed in writing, is marked or otherwise identified by the Disclosing Party as confidential or, if disclosed orally is identified in writing by the Disclosing Party as confidential within ten (10) days following the disclosure. Confidential Information shall not include any information or data that the Receiving Party can demonstrate:

- (a) was generally available to the public before its disclosure to the Receiving Party or became generally available to the public after its disclosure to the Receiving Party, provided that such information or data did not become generally available to the public by means of an unauthorized act or omission of the Receiving Party;
- (b) was already in the possession of the Receiving Party before its disclosure under this Agreement, as demonstrated by Receiving Party's written records, provided that such information or data was not obtained directly or indirectly from the Disclosing Party under an obligation of confidentiality;
- (c) was disclosed to the Receiving Party, whether before or after its disclosure under this Agreement, by a Third Party, provided that such information or data was not obtained directly or indirectly from the Disclosing Party under an obligation of confidentiality; or
- (d) was independently developed or discovered by employees or agents of the Receiving Party without any use of Confidential Information of the Disclosing Party as demonstrated by Receiving Party's written records.

All of the Proteomics Services technologies provided by Kinexus will be deemed to have been identified as proprietary and considered the Confidential Information of Kinexus.

1.5 "Contact" means the contact person of the Customer that is designated on the Service Order Forms, who is deemed to have the authority to deliver Samples, Service Order Forms, Service Information Forms, and Sample Description Forms to Kinexus, on behalf of the Customer, under this Agreement.

1.6 "Proteomics Analyses" means one or more of the Custom and Standard Proteomics Services offered by Kinexus that may permit the identification and/or quantification of proteins, their phosphorylation states, their interactions with proteins, peptides, and other compounds, and the regulation of their functional activities by these agents.

1.7 "Proteomics Products" means the products of the Custom Proteomics Services offered by Kinexus to manufacture one or more proteins using recombinant DNA technology, and designer peptides by chemical synthesis.

1.8 "Sample" means a lysate or semi-purified fraction from cells and tissues, a protein, and/or a compound provided to Kinexus by the Customer, which the Customer has prepared and shipped in a manner that it can be properly used by Kinexus for the Proteomics Analyses. Samples for Proteomics Analyses may also be provided by Kinexus at the request of the Customer.

1.9 "Sample Description Form" means the Kinexus form to be completed by the Customer to provide information on the nature of each Sample submitted for the Proteomics Analyses. It is included in the Proteomics Services Customer Information Package with this Agreement, and may be amended from time to time as updated on the Kinexus website.

1.10 "Antibody" means the immunoglobulin reagent that permits detection of a target protein or phosphorylation site.

1.11 "Antibody Description Form" means the Kinexus form to be completed by the Customer to provide information on the nature of each Antibody submitted by the Customer for the Proteomics Analyses. It is included

in the Proteomics Services Customer Information Package with this Agreement, and may be amended from time to time as updated on the Kinexus website.

1.12 "Service Order Form" means the Kinexus form to be completed by the Customer to provide Kinexus with the Customer's contact and billing information for the Proteomics Analyses or Proteomics Products. This form indicates the level of confidentiality requested by the Customer. It is included in the Proteomics Services Customer Information Package with this Agreement, and may be amended from time to time as updated on the Kinexus website.

1.13 "Service Information Form" means the Kinexus form to be completed by the Customer to provide Kinexus with a specific listing of the Samples to be tested for the Proteomics Analysis or a specific description of the Proteomics Products that are requested. It is included in the Proteomics Services Customer Information Package with this Agreement, and may be amended from time to time as updated on the Kinexus website.

1.14 "Report" means the underlying raw data and the report provided to The Customer hereunder consisting of the Proteomic Analyses of Samples, including, but not limited to tables of the experimental results. For Proteomics Products, the Report may include raw data confirming the composition and purity of the Proteomics Products.

1.15 "Field of Use" means use by Kinexus and its Affiliates and Academic Collaborators of data from the Report for research and commercial purposes relating to the creation and interpretation of knowledge about the composition, architecture and operation of cell signalling networks, improving its Proteomics Services, and the compilation of databases that may become accessible to Third Parties on-line over the Internet.

1.16 "Third Party" means any entity other than Kinexus', Kinexus' Affiliates, the Customer and the Customer's Affiliates.

1.17 "Effective Date" means the date of the last signature on this Agreement.

2. REQUEST FOR AND DELIVERY OF PROTEOMICS SERVICES

2.1 Request for Proteomics Services. From time to time, over the Term of this Agreement (as defined in Section 6.1 herein), the Customer can engage Kinexus to provide its Proteomics Analyses or Proteomics Products. After submission of a quotation from Kinexus to the Customer, by delivery to Kinexus of a Service Order Form, a Service Information Form and a Sample Description Form with Samples as appropriate, the Customer hereby requests and authorizes Kinexus to perform Proteomics Services and deliver the results of these services to the Customer, pursuant to the terms and conditions in this Agreement. In the case of Customer requested Proteomics Analyses, this would include the delivery of a Report. In the case of Customer requested Proteomics Products, this would include the delivery of the Proteomics Products and a Report.

2.2 Representation and Warranty. The Customer represents and warrants that: (a) it has all right and authority to provide the Sample to Kinexus for analysis under the terms and conditions of this Agreement, (b) it collected the Sample lawfully and with all necessary consents and approvals, and (c) that the collection, use and disclosure of the Sample by Kinexus pursuant to this Agreement will not violate the rights of any Third Party.

2.3 Delivery Conditions for Customer Sample. The Customer shall be responsible for making shipping arrangements to deliver Samples to Kinexus. The Customer shall also be responsible for complying with all applicable laws and regulations (including but not limited to customs requirements and relevant handling procedures and protocols) and obtaining any and all permits, forms or permissions that may be required by all regulatory authorities to ship and deliver the Sample; to Kinexus and for Kinexus to accept delivery of the Sample.

2.4 Processing and Delivery of Report and Proteomics Products. Subject to the terms of this Agreement, Kinexus shall analyze Samples with the Customer-specified Proteomics Services or produce Customer-specified Proteomics Products, and deliver a Report to the Customer as requested on the Service Order Form and Service Information Form.

2.5 Quality of Samples for Proteomics Analyses. Kinexus shall not deliver a Report on any Sample that Kinexus, in its sole discretion, believes has not been prepared and delivered in a manner that would compromise its ability to provide a reliable result. Under such a circumstance, the Sample will be destroyed by Kinexus after ten (10) days notification by e-mail to the Customer or at the request of the Customer prior to the scheduled destruction of the Sample, it will be returned to the Customer provided that the Customer agrees to reimburse Kinexus for the courier costs for its delivery.

3. PAYMENTS

3.1 Payments for Proteomics Services. For each Proteomics Analyses and Proteomics Product requested under this Agreement, the Customer shall pay to Kinexus a fee in accordance with the amount specified on the Service Order Form and the Service Identification Form for the requested service, which may be amended from time to time as updated on Kinexus' website. This amount will be based on a formal quotation issued by Kinexus to the Customer. In the absence of a formal quotation, the pricing will be based on the pricing specified in the latest versions of the Customer Information Packages for Proteomics Services that are downloadable from the Kinexus website (www.kinexus.ca). The category of pricing depends on the level of requested confidentiality for analysis:

- (a) Non-Confidential Analyses. If the Samples are provided by the Customer, then all of the Sample information on the Client Supplied **Non-Confidential** Sample Description Form is completed and **is not** designated as Confidential Information on the Service Identification Form. If Antibodies are supplied by the Customer, then all of the Antibody information on the Client Supplied Antibody Description Form (see example in Appendix) must be completed and **is not** designated as Confidential Information on the Service Identification Form.
- (b) Confidential Analyses. If the Samples are provided by the Customer, then all of the Sample information on the Client Supplied **Confidential** Sample Description Form must be completed and **is** designated as Confidential Information on the Service Identification Form.

3.2 The Customer shall issue a purchase order or provide a charge account at the time the Customer sample arrives at Kinexus' offices at Suite 1, 8755 Ash Street, Vancouver, British Columbia, Canada, V6P 6T3. Kinexus will invoice Customer when the Proteomics Analyses or Proteomics Products are complete and delivered to Customer. Payment terms are net 30 days from date of invoice.

3.3 Interest on Late Payments. Any overdue payments by the Customer to Kinexus under this Agreement shall bear interest, to the extent permitted by applicable law at 18% per annum, calculated on the total number of days payment is delinquent; provided, however, that interest shall not accrue pursuant to this Section 3.3 on any amounts payable under this Agreement with respect to which payment is disputed in good faith; provided, further that interest shall accrue pursuant to this Section 3.3 once such dispute has been resolved if payment is not made promptly thereafter.

4. INTELLECTUAL PROPERTY RIGHTS

4.1 Ownership of Sample Information. The Customer owns all rights to the Sample information provided to Kinexus. For Non-Confidential Proteomics Analyses, the Customer grants Kinexus a non-exclusive, royalty-free fully paid up worldwide perpetual license to use, copy, publish, compile, display, communicate, modify, translate and otherwise exploit (and authorize Third Parties to do any of the foregoing) to use the information on the Client Supplied **Non-Confidential** Sample Description Form in the Field of Use, provided that the Customer's identity is not linked to, or otherwise disclosed with respect to, such data.

4.2 Ownership of Report. The Customer shall own the data in the Report. For Non-Confidential Proteomics Analyses, the Customer grants Kinexus a non-exclusive, royalty-free fully paid up worldwide perpetual license to use, copy, publish, compile, display, communicate, modify, translate and otherwise exploit (and authorize Third Parties to do any of the foregoing) data from the Report in the Field of Use.

4.3 Confidentiality of Sample Information. Kinexus will have no rights with respect to the Confidential Sample information until the Sample information is published or otherwise enters the public domain. Thereafter, Kinexus can use the results of the Proteomics Analyses of the Customer Samples for its internal research and development programs.

4.4 Ownership of Proteomics Products. The Customer owns the Proteomics Products that have been delivered to the Customer in the amounts specified in the Service Order Form and the Service Information Form. Kinexus owns any excess Proteomics Products and may dispose of these in its best interests.

4.5 Ownership of New Intellectual Property.

- (a) The Customer shall own and have rights to all inventions, discoveries, improvements, know-how, technical information, data or other technology discovered, conceived, made, developed and/or reduced to practice through the use of the data in the Report and Proteomics Products solely by employees of the Customer or jointly with its Affiliates;
- (b) Kinexus shall own and have rights to all inventions, discoveries, improvements, know-how, technical information, data or other technology discovered, conceived, made, developed and/or reduced to practice through the use of the data in the Report and Proteomics Products solely by employees of Kinexus or jointly with its Affiliates.

4.6 Non-Exclusive License to Preserve Kinexus Proteomics Services Freedom of Operation. In the event one or more claims of an issued patent arising from the use of a Report by the Customer, its Affiliates, Academic Collaborators or Corporate Partners would, absent a license from the Customer or its Affiliates, prevent Kinexus from using or permitting others to use the Kinexus Proteomics Services or any data therein, then the Customer and/or its Affiliates (as applicable) shall grant to Kinexus a non-exclusive, royalty-free fully-paid up perpetual license, including the right to grant sublicenses, under any such patent claim to use and permit others to use the Proteomics Services.

5. CONFIDENTIALITY

5.1 Confidentiality. Each Receiving Party shall treat the Confidential Information of the Disclosing Party as strictly confidential and (a) take reasonable precautions to protect such Confidential Information (including, without limitation, all precautions such as the Receiving Party employs with respect to its own confidential information), (b) not disclose or make available to any Third Party such Confidential Information without the express prior written consent of the Disclosing Party and (c) use such Confidential Information only for purposes specifically authorized under this Agreement. Each Receiving Party may disclose Confidential

Information to its employees, consultants, Affiliates and agents, and to licensees or prospective licensees of its rights to any invention, on a need-to-know basis and on the condition that such employees, Affiliates, agents, licensees and prospective licensees are obligated to maintain the confidentiality of the Confidential Information under written agreements that contain terms and conditions no less restrictive than the terms and conditions of this Section 5. Each Receiving Party may disclose Confidential Information of the Disclosing Party pursuant to a demand issued by a court or governmental agency or as otherwise required by law, provided, however, that the Receiving Party notifies the Disclosing Party promptly upon receipt thereof, giving the Disclosing Party sufficient advance notice to permit it to seek a protective order or other similar order with respect to such Confidential Information, and provided, further, that the Receiving Party furnishes only that portion of the Confidential Information which it is advised by counsel is legally required whether or not a protective order or other similar order is obtained by the Disclosing Party.

5.2 Publication. The Customer may publish and/or present the Report, abstracts or manuscripts generated utilizing the Report, and any data and/or results generated by the Customer utilizing the Report. The Customer is encouraged to disclose in scientific publications any Proteomics Analyses that were performed by Kinexus and any Proteomics Products were produced by Kinexus that meaningfully contributed to the described work. Please refer to “Kinexus Bioinformatics Corporation (Vancouver, Canada).” For all Samples submitted for analysis and identified as Non-Confidential by the Customer, Kinexus will not use, copy, publish, compile, display, communicate, modify, or translate the Sample Information or the data from the Report for a period of 180 days (6 months) following the return of the Report to the Customer. At any time, the Customer may opt to pay the difference in price between the Non-Confidential pricing level to the Confidential pricing level for each applicable Sample, to ensure the confidentiality status of such sample is changed.

5.3 Confidential Sample Information. All parties agree that the term of confidentiality pertaining to that Sample information will expire when the Sample information is published or otherwise enters public domain through no fault of Kinexus.

5.4 Use of Customer Name. Except as expressly provided in Section 9.5, no right or license is granted hereunder by Customer for Kinexus to use the Customer’s name in relation to data from a Report to a third party.

6. TERM AND TERMINATION

6.1 Term. The term of this Agreement (“**Term**”) shall commence on the Effective Date and shall remain in effect for fifteen (15) years or until the termination of this Agreement pursuant to the terms hereof.

6.2 Early Termination. Each party shall have the right to terminate this Agreement at any time prior to Kinexus' delivery of a Report or Proteomics Product to the Customer hereunder, upon ten (10) days written notice to the other party, if such party reasonably determines that the production, or use of such Sample infringes intellectual property rights of any Third Party, and the Customer elects not to obtain a license under the necessary Third Party intellectual property rights at its sole expense. If this Agreement is terminated by either party pursuant to this Section 6.2, neither party shall have any obligation to the other with respect to payments under this Agreement regarding the Sample or Proteomics Product at issue.

Kinexus shall have the right to terminate any work order for any Proteomics Services upon ten (10) days written notice to the Customer, upon the identification of a technical difficulty related to the Sample or Proteomics Product which would prevent it from delivering the Report or Proteomics Product using reasonable efforts. If Kinexus terminates a work order as a result of a technical difficulty related to a Customer Sample that is the fault of Kinexus, Kinexus shall provide for the reanalysis of the same number of problematic Customer Samples for the Proteomics Analyses at the original agreed upon price without any additional expenses incurred by the Customer, or Kinexus shall repay any prepayment fee paid by the Customer for such a Customer Sample and neither party shall have any further obligation to the other with respect to that Customer Sample.

If Kinexus terminates a work order for Proteomics Analyses as a result of a technical difficulty related to the Customer Sample (including insufficient material or other problems associated with the quality of the Sample) that is the fault of the Customer, then Kinexus shall provide for the reanalysis of the problematic Customer Samples at the original agreed upon price without any additional expenses incurred by the Customer, provided Kinexus completes the full Proteomics Analyses for all Samples. For any subsequent resubmission of Customer Samples for Proteomics Analyses due to technical difficulty that is again the fault of the Customer, Kinexus shall provide for the reanalysis of the problematic Customer Samples at an additional charge per sample at a price mutually agreed by the Customer and Kinexus. If the Customer elects not to resubmit Samples for Proteomics Analyses, then the Customer will pay Kinexus an amount equivalent to 50% of the quoted price for the work performed by Kinexus to this point.

6.3 Events of Default. An event of default (an “Event of Default”) shall be deemed to occur upon a material breach of this Agreement by a party (including, without limitation, any breach of the provisions of Section 5) if the breaching party fails to remedy such breach within thirty (30) days after written notice thereof by the non-breaching party.

6.4 Effect of an Event of Default.

- (a) Remedies Available to Kinexus. If an Event of Default occurs relating to a material breach by the Customer, then Kinexus shall have the right, at its option exercisable in its sole discretion, in addition to any other rights or remedies available to it at law or in equity, to immediately terminate this Agreement upon notice thereof to the Customer, in which case the Customer shall return to Kinexus, or, upon Kinexus' written instruction, destroy any Report, Proteomics Products, and all information, other materials or documentation provided or made available by Kinexus pursuant to this Agreement, and any copies thereof (including electronic copies).
- (b) Remedies Available to the Customer. If an Event of Default occurs relating to a material breach by Kinexus, then the Customer shall have the right, at its option exercisable in its sole discretion, in addition to any other rights or remedies available to it at law or in equity and subject to the limitations set forth in Section 7, to terminate this Agreement upon notice thereof to Kinexus.

6.5 Effect of Expiration or Termination of Agreement. The expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. Kinexus will not be required to continue Custom Immunohistochemistry Analyses on a Sample after termination, and the Customer will be required to pay for work done prior to termination. The provisions of Sections 4, 5, 6, 7, 8, and 9 hereof shall survive any expiration or termination of this Agreement.

7. **DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY**

7.1 Disclaimer of Warranties. THE PROTEOMICS SERVICES ARE BEING SUPPLIED TO CUSTOMER WITH NO EXPRESS, IMPLIED, STATUTORY OR OTHER WARRANTIES, REPRESENTATIONS, CONDITIONS OR GUARANTEES, INCLUDING THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND DURABILITY. WITHOUT LIMITING THE FOREGOING, KINEXUS MAKES NO REPRESENTATION OR WARRANTY THAT THE USE OF THE REPORT, ANY PROTEOMICS PRODUCTS OR THE DATA THEREIN OR THE PERFORMANCE OF THIS AGREEMENT WILL NOT INFRINGE ANY INTELLECTUAL PROPERTY OR OTHER RIGHTS OF ANY THIRD PARTY.

7.2 Limitation of Liability. Kinexus shall not be liable for any use by the Customer, its Affiliates, Corporate Partners, or Academic Collaborators of the Report and any Proteomics Products or any loss, claim,

damage or liability, of whatever kind or nature, which may arise from or in connection with the use of the Report or the data therein, and any Proteomics Products. NOTWITHSTANDING ANYTHING ELSE IN THIS AGREEMENT OR OTHERWISE TO THE CONTRARY, NEITHER KINEXUS NOR CUSTOMER WILL BE LIABLE TO EACH OTHER WITH RESPECT TO ANY MATTER ARISING UNDER THIS AGREEMENT UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR (I) ANY PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS OR (II) COST OF PROCUREMENT OF SUBSTITUTE GOODS, TECHNOLOGY OR SERVICES. WITHOUT IN ANY WAY LIMITING THE FOREGOING, KINEXUS SHALL NOT, IN ANY EVENT, HAVE ANY LIABILITY WHATSOEVER IN CONNECTION WITH THIS AGREEMENT IN EXCESS OF AN AMOUNT EQUAL TO THE FEES PAID TO KINEXUS BY CUSTOMER HEREUNDER IN RESPECT OF THE PROTEOMICS SERVICES AT ISSUE.

8. INDEMNIFICATION

Except to the extent prohibited by law, the Customer shall assume all liability for, and shall defend, indemnify and hold Kinexus, its Affiliates and their respective directors, officers, employees and agents harmless from, all claims, losses, damages or expenses (including reasonable attorneys' fees) arising directly or indirectly as a result of: (a) the use of the Report or the data therein and any Proteomics Products by the Customer or its Affiliates, Corporate Partners or Academic Collaborators, or (b) the breach, untruthfulness or inaccuracy of any of the Customer's representations and warranties in this Agreement.

9. MISCELLANEOUS

9.1 Entire Agreement. The Appendices to this Agreement, together with all terms and conditions contained within this Agreement constitute the entire understanding between the parties with respect to the subject matter hereof and, with respect to any conflicting terms from prior agreements between the parties, supersedes and cancels such conflicting sections from all previous registrations, agreements, commitments and writings in respect thereof. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by both parties hereto.

9.2 Assignment and Waiver. This Agreement may not be assigned or otherwise transferred by either party without the written consent of the other party, such consent will not be unreasonably withheld. Notwithstanding the foregoing, Kinexus may, without such consent, assign its rights and obligations under this Agreement (a) to any Affiliate or (b) to a Third Party in connection with a merger, consolidation or sale of such portion of its assets that includes rights under this Agreement provided, however, that Kinexus' rights and obligations under this Agreement shall be assumed by its successor in interest in any such transaction. In the event of such a transaction with Third Party, notwithstanding the other provisions of this Agreement, the intellectual property rights of such Third Party shall not be subject to the licenses granted by Kinexus under this Agreement. Any purported assignment in violation of the provisions of this Section 9.2 shall be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement. The waiver by either party hereto of any right hereunder or the failure to perform or of a breach by the other party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other party whether of a similar nature or otherwise.

9.3 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any obligation under this Agreement when such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, including but not limited to fire, floods, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor or supply disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party; provided, however, that the party so affected shall use reasonable commercial efforts to avoid or remove such causes of nonperformance, and

shall continue performance hereunder with reasonable dispatch whenever such causes are removed. Either party shall provide the other party with prompt written notice of any delay or failure to perform that occurs by reason of force majeure. The parties shall mutually seek a resolution of the delay or the failure to perform as noted above.

9.4 Notices. Any consent, notice, or report required or permitted to be given or made under this Agreement by one of the notification parties hereto to the other shall be in writing, delivered personally, by email or by facsimile (and promptly confirmed by telephone, personal delivery or courier) or courier, postage prepaid (where applicable), addressed to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor and shall be effective upon receipt by the addressee.

If to Kinexus:

Kinexus Bioinformatics Corporation
Suite 1, 8755 Ash Street
Vancouver, British Columbia, Canada V6P 6T3
Attention: Dr. Steven Pelech
President & C.S.O.
Telephone: (604) 323-2547 extension 10
Facsimile: (604) 323-2548

If to the Customer:

To the Customer at the address designated at the front of this Agreement and to the attention of the duly authorized representative signing this Agreement.

9.5 Publicity. Except as required by law, the terms of this Agreement shall be treated as Confidential Information and shall not be disclosed to anyone (except for the parties' respective directors, officers, employees, consultants, agents and attorneys assisting in the review and negotiation of this Agreement and/or who have a need to know the terms of this Agreement) without the written consent of the other party, such consent which will not be unreasonably withheld. Notwithstanding the foregoing, (a) Kinexus may, without such consent, publicly announce the execution of this Agreement with the Customer and may reference the Customer as a Kinexus client.

9.6 No Partnership. It is expressly agreed that the relationship between Kinexus and the Customer shall not constitute a partnership, joint venture or agency. Neither Kinexus nor the Customer shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior consent of the other party to do so.

9.7 Applicable Law. This Agreement shall be governed by, construed, interpreted and enforced in accordance with, the laws of the province of British Columbia and the laws of Canada, without reference to conflict of laws principles.

9.8 Dispute Resolution.

- (a) The parties hereby agree that they will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement promptly by negotiations. If a controversy or claim should arise hereunder, the matter shall be referred to an individual designated by the Chief Executive Officer or President of Kinexus and an individual designated by the Chief Executive Officer (or the equivalent position) of the Customer (the "Representatives"). If the matter has not been resolved within twenty-one (21) days of the first meeting of the Representatives of the parties (which period may be extended by mutual agreement) concerning such matter, subject to rights to injunctive relief and specific performance, and unless otherwise specifically provided for herein, any controversy or claim arising out of or relating to this Agreement, or the breach thereof, will be settled as set forth in Section 9.8(b).

- (b) All disputes arising in connection with this Agreement that are not resolved pursuant to Section 9.8(a) above shall be finally settled in Vancouver, British Columbia, by a single arbitrator appointed pursuant to the provisions of the *Commercial Arbitration Act* (British Columbia). Notwithstanding the above, either party has the right to bring an action in a court of competent jurisdiction against the other party for (i) any breach of such other party's duties of confidentiality pursuant to Section 5 of this Agreement; (ii) any infringement of its proprietary rights by the other party; and (iii) for interim protection such as, by way of example, an interim injunction. Judgment upon the arbitrator's award may be entered in any court of competent jurisdiction. The award of the arbitrator may include compensatory damages against either party, but under no circumstances will the arbitrator be authorized to, nor shall he/she, award punitive, consequential or incidental damages against either party. The parties agree not to institute any litigation or proceedings against each other in connection with this Agreement except as provided in this Section 9.8.

9.9 Severability. Each party hereby agrees that it does not intend to violate any public policy, statutory or common laws, rules, regulations, treaty or decision of any government agency or executive body thereof of any country or community or association of countries. Should one or more provisions of this Agreement be or become invalid, the parties hereto shall substitute, by mutual consent, valid provisions for such invalid provisions which valid provisions in their economic effect are sufficiently similar to the invalid provisions that it can be reasonably assumed that the parties would have entered into this Agreement with such valid provisions. In case such valid provisions cannot be agreed upon, the invalidity of one or several provisions of this Agreement shall not affect the validity of this Agreement as a whole, unless the invalid provisions are of such essential importance to this Agreement that it is to be reasonably assumed that the parties would not have entered into this Agreement without the invalid provisions.

9.10 Counterparts. This Agreement may be executed in counterparts, each of which when executed and delivered is an original, but both of which together shall constitute one and the same instrument.

9.11 Fax Delivery. This Agreement may be executed by the parties and transmitted by facsimile and if so executed and transmitted this Agreement will be for all purposes as effective as if the parties had delivered an executed original Agreement.

IN WITNESS WHEREOF, the parties have caused their duly authorized officer to execute and deliver this Agreement as of the Effective Date.

Printed Name of Institute or Company

Per: _____
Signature of Authorized Representative

Name: _____
Printed Name of Authorized Representative

Title: _____
Printed Title of Authorized Representative

Date signed: _____

KINEXUS BIOINFORMATICS CORPORATION

Per: _____
Signature of Dr. Steven Pelech

Dr. Steven Pelech

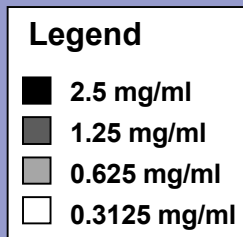
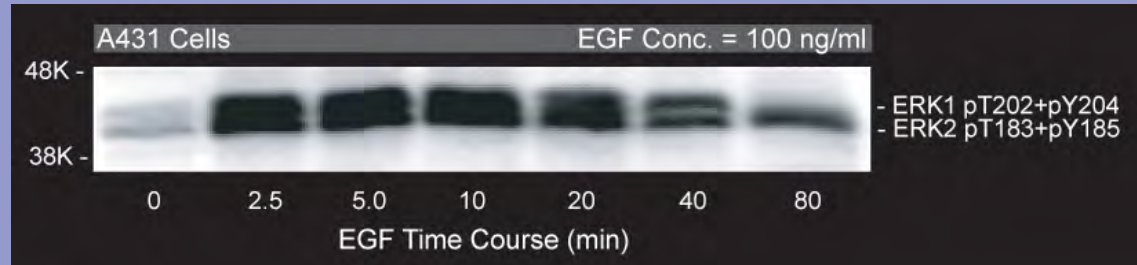
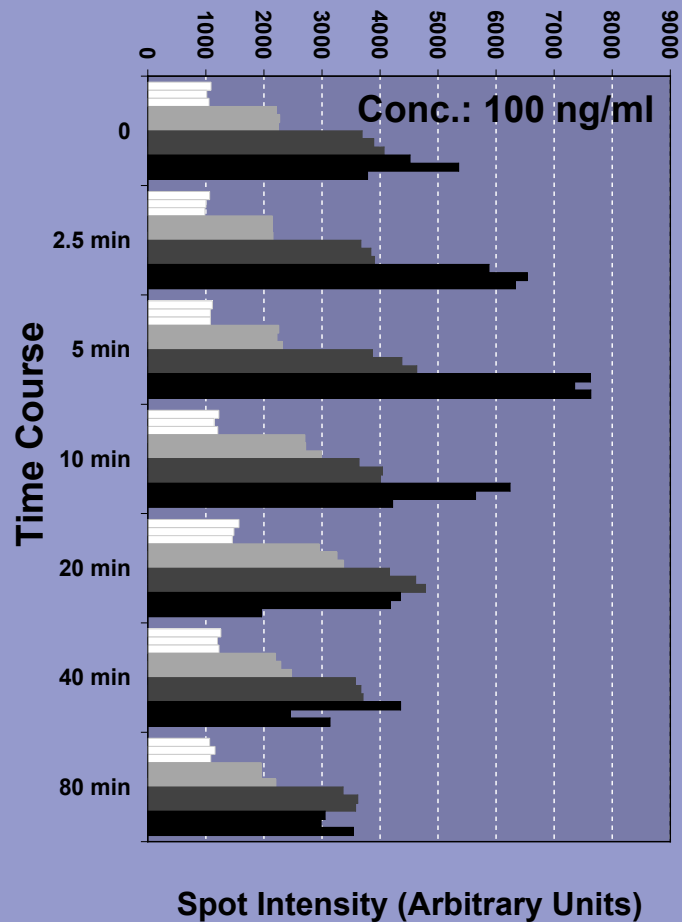
President and Chief Scientific Officer

Date signed: _____

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: A431 Human Epidermoid Carcinoma

Treatment: Epidermal Growth Factor



www.kinexus.ca

KINEXUS

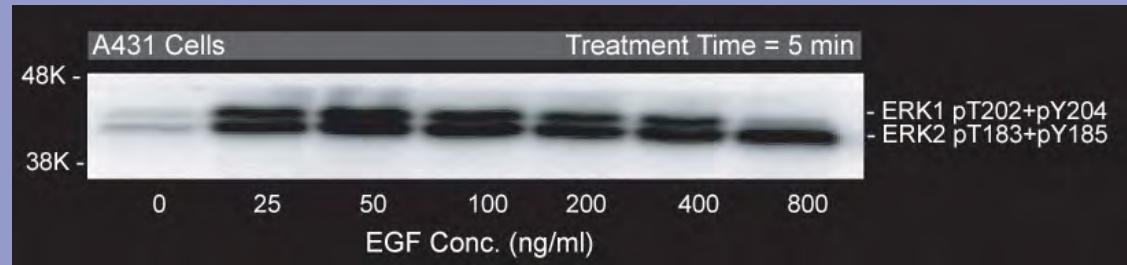
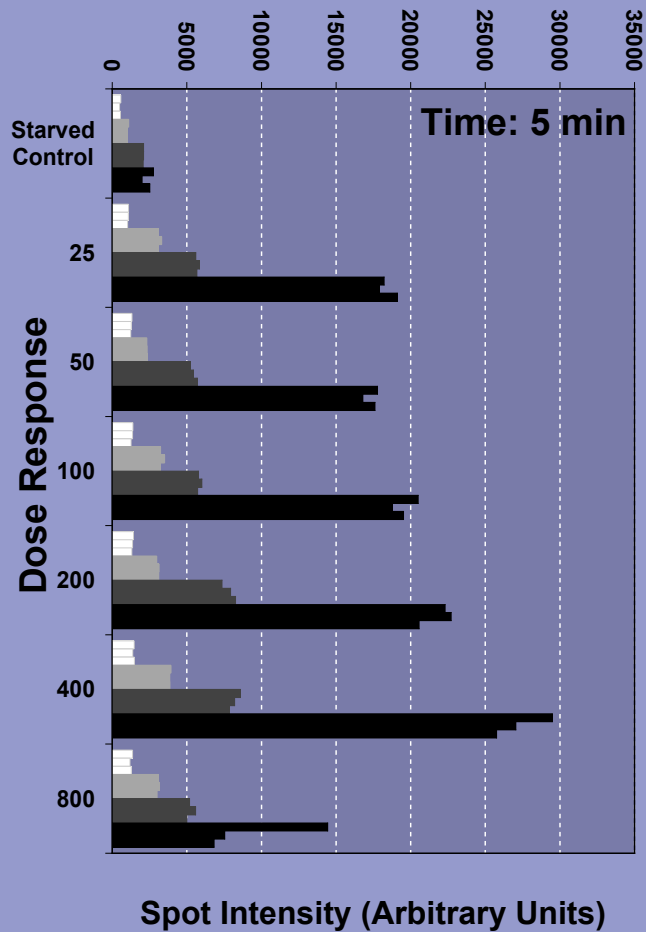


Kinex™ Reverse Lysate Microarray KRLM-1.0

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: A431 Human Epidermoid Carcinoma

Treatment: Epidermal Growth Factor



Legend

- 3.2 mg/ml
- 1.6 mg/ml
- 0.8 mg/ml
- 0.4 mg/ml

www.kinexus.ca

KINEXUS

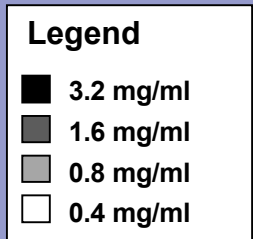
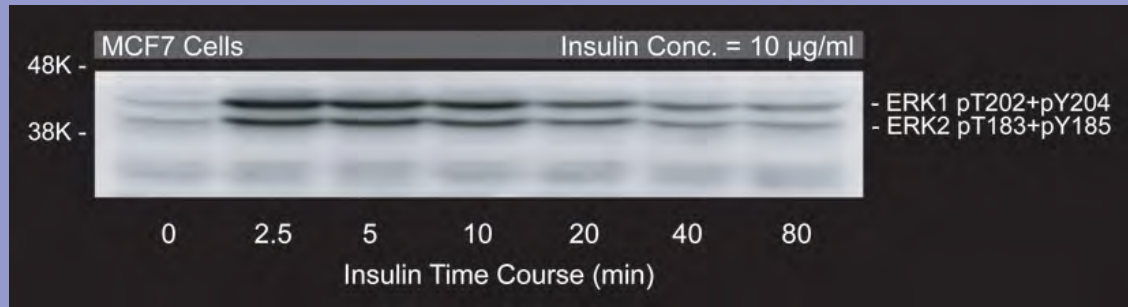
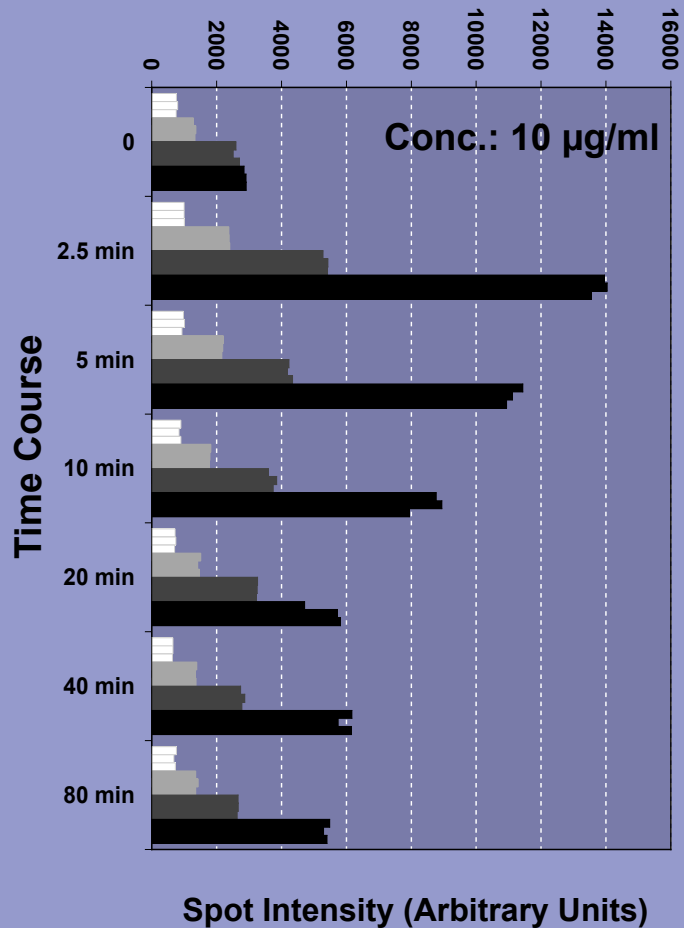


Kinex™ Reverse Lysate Microarray KRLM-1.0

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: MCF7 Human Breast Adenocarcinoma

Treatment: Insulin

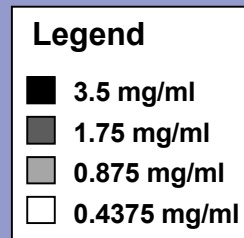
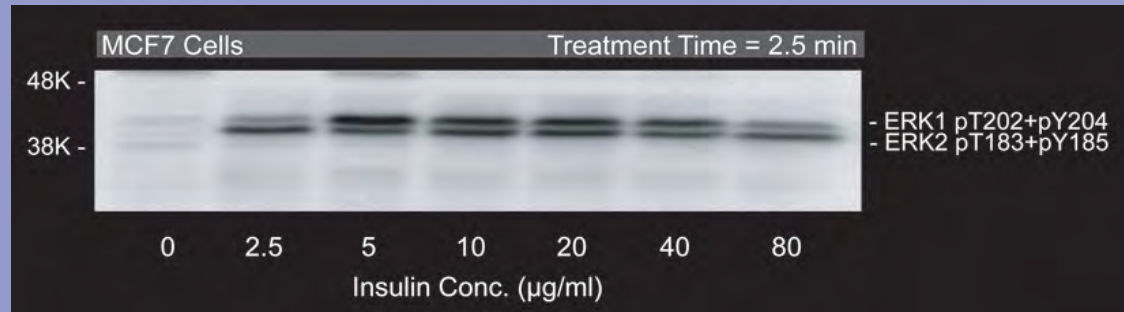
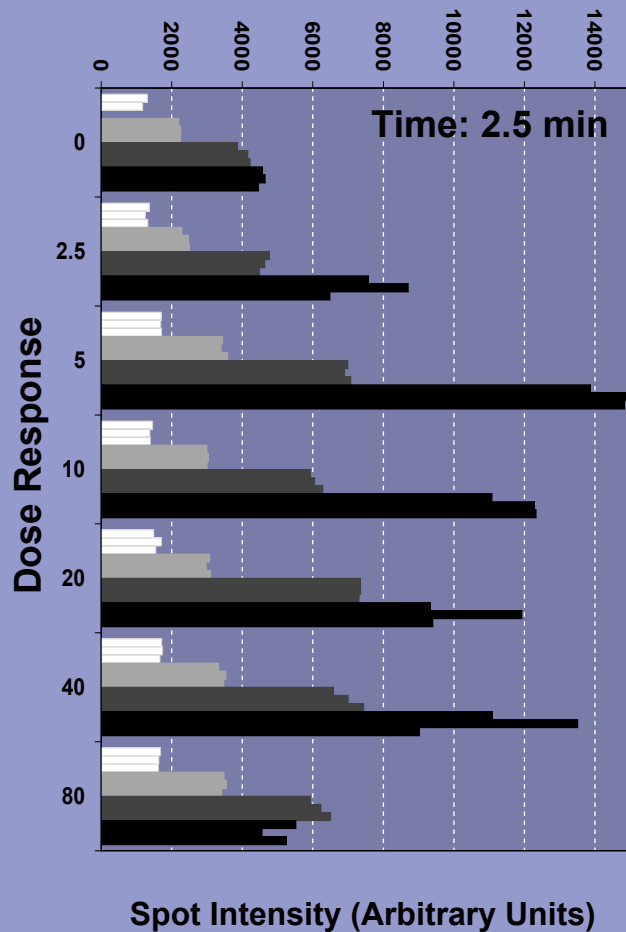


www.kinexus.ca

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: MCF7 Human Breast Adenocarcinoma

Treatment: Insulin



www.kinexus.ca

KINEXUS

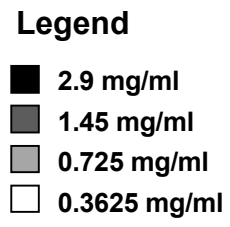
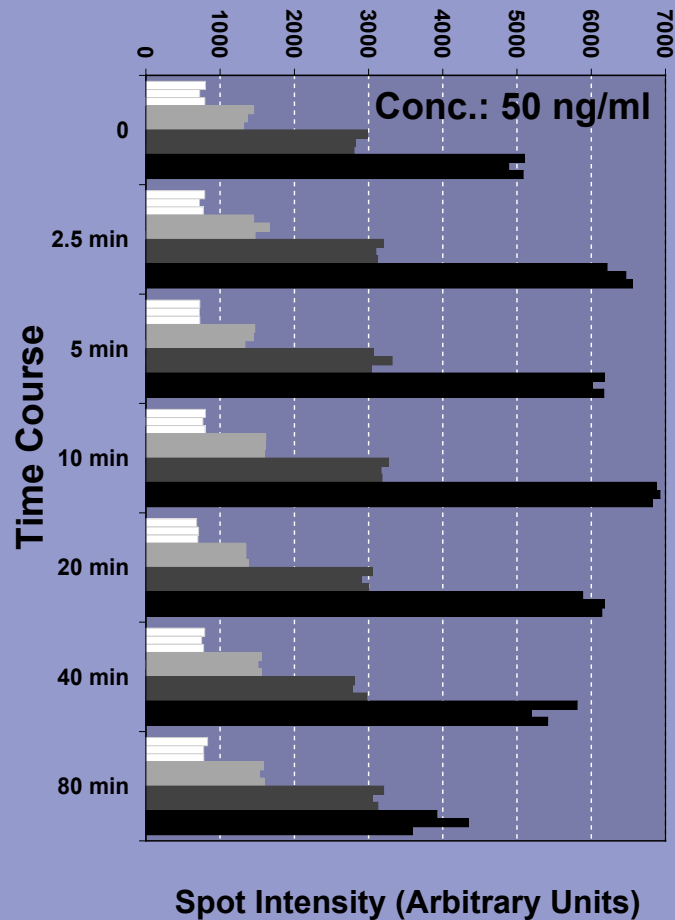


Kinex™ Reverse Lysate Microarray KRLM-1.0

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: T98G Human Brain Glioblastoma

Treatment: Platelet Derived Growth Factor



www.kinexus.ca

KINEXUS

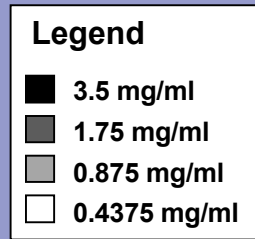
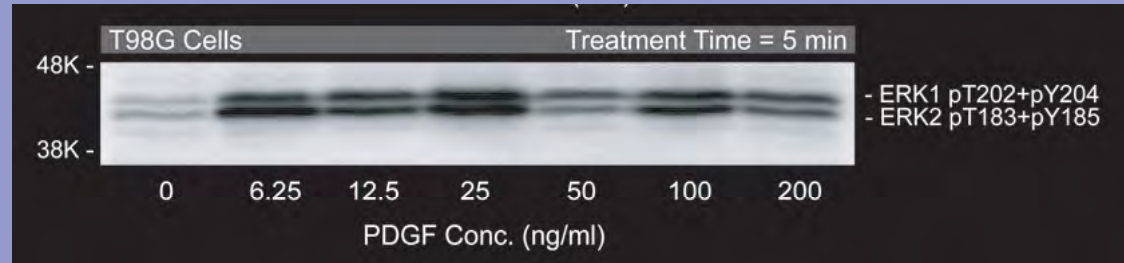
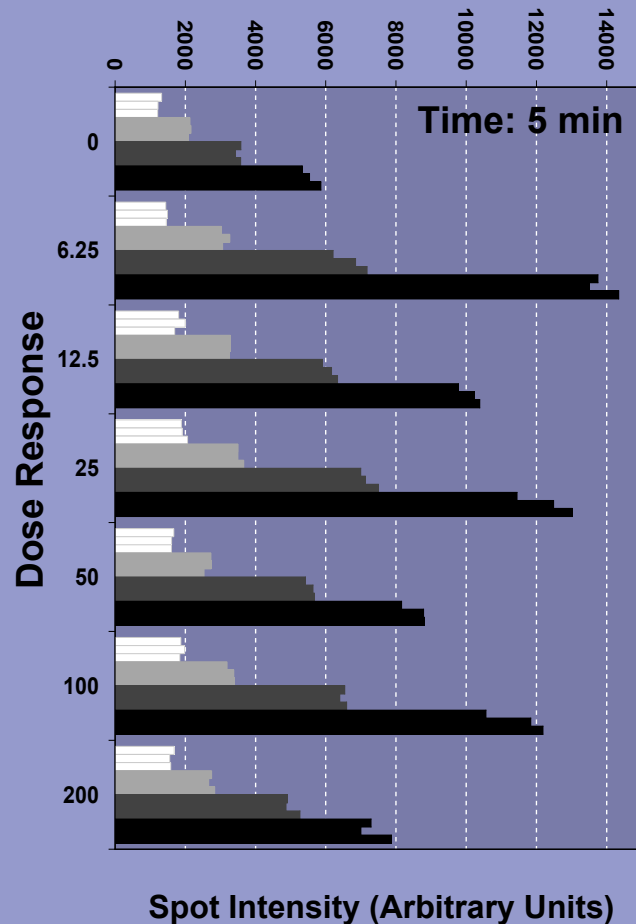


Kinex™ Reverse Lysate Microarray KRLM-1.0

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Cell Line: T98G Human Brain Glioblastoma

Treatment: Platelet Derived Growth Factor



www.kinexus.ca

KINEXUS

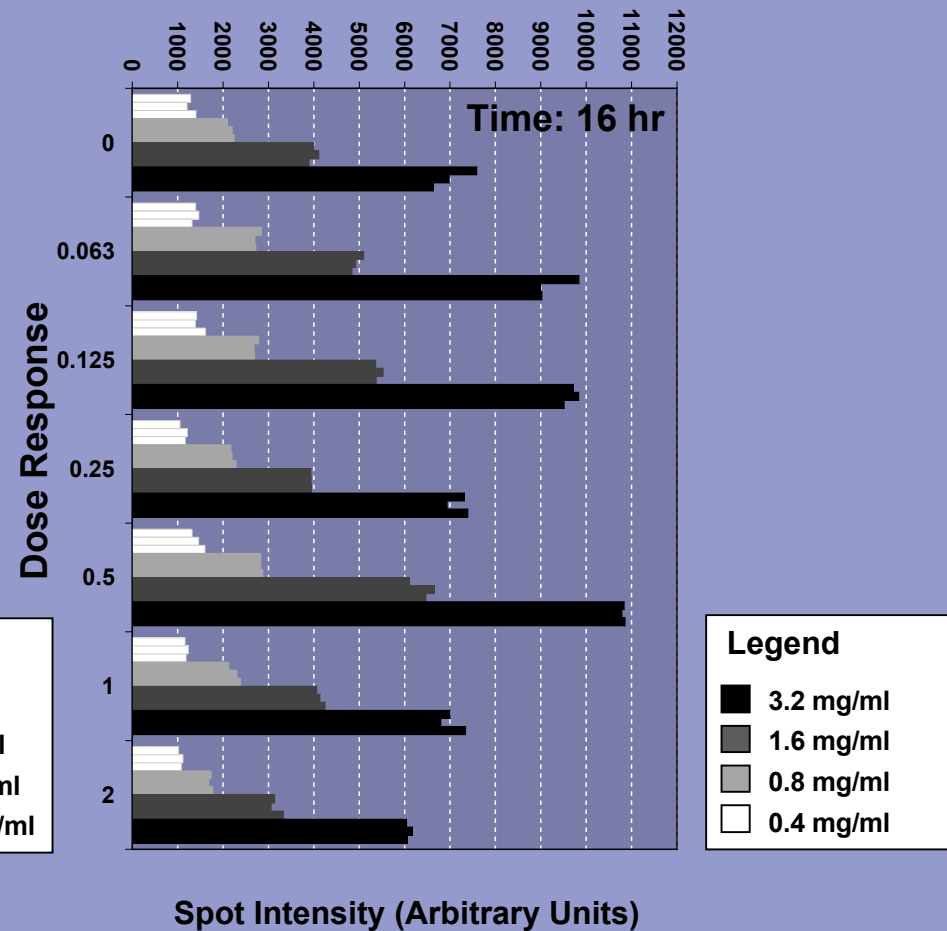
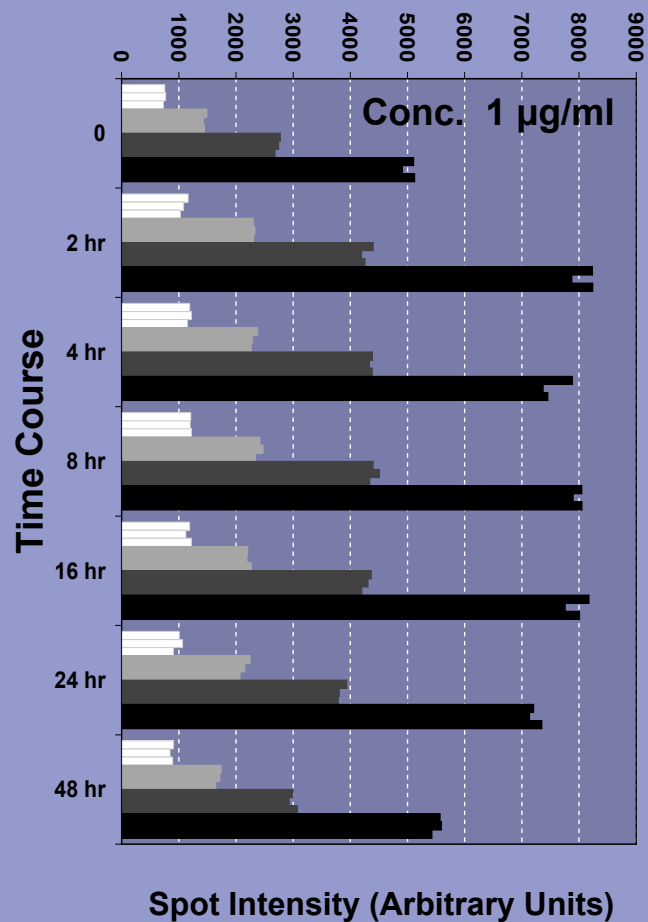


Kinex™ Reverse Lysate Microarray KRLM-1.0

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

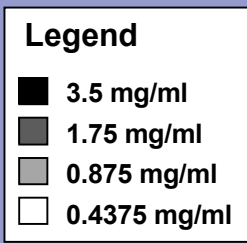
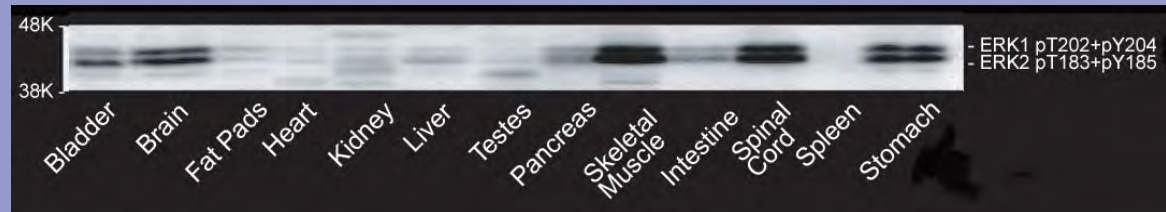
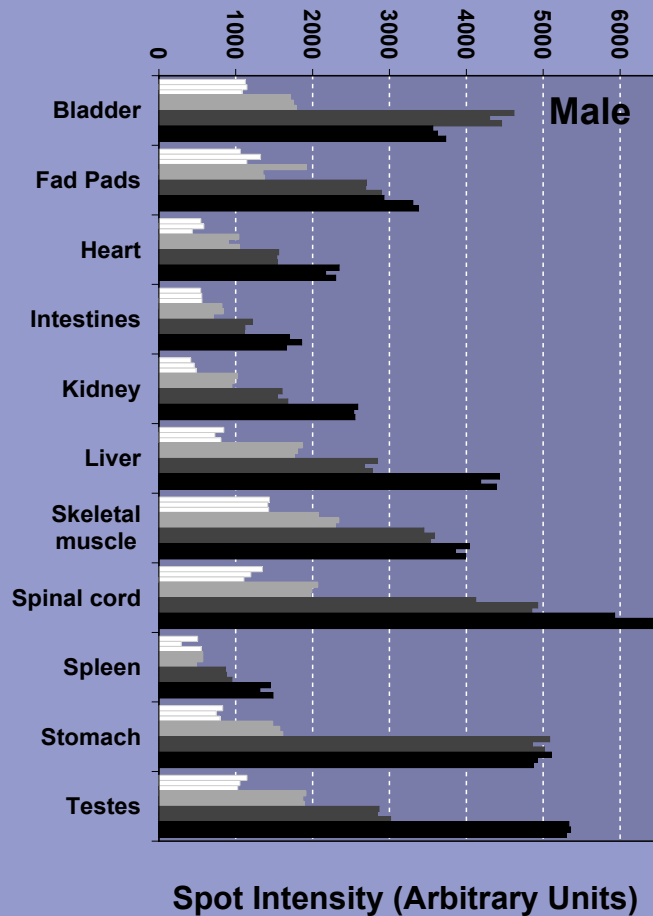
Cell Line: HL60 Human Promyelocytic Leukemia

Treatment: Staurosporine



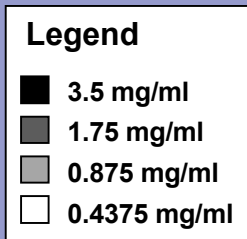
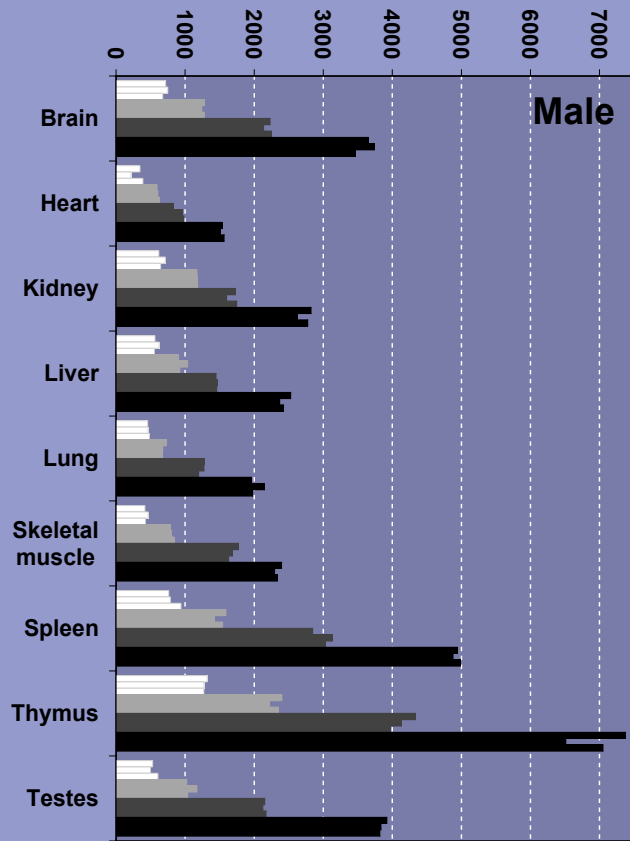
Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Rhesus Monkey Tissues - Untreated

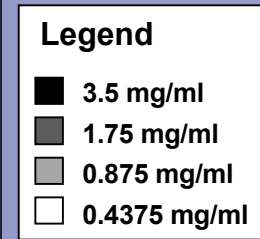
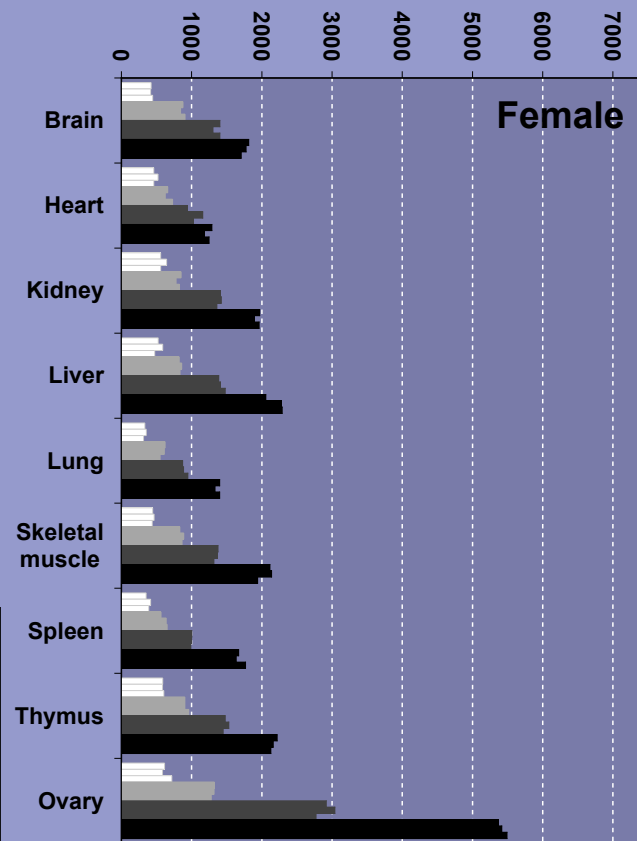


www.kinexus.ca

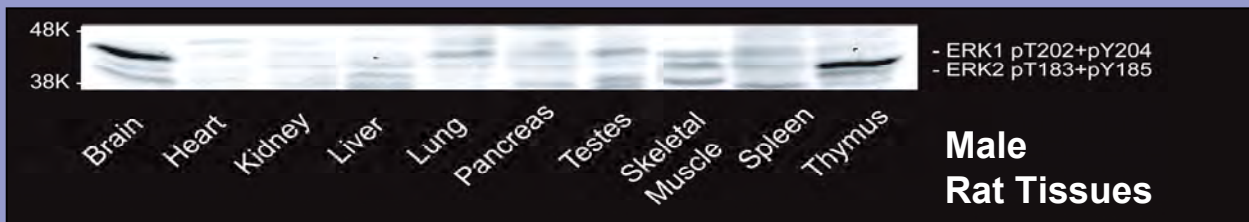
Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation Rat Tissues - Untreated



Spot Intensity (Arbitrary Units)



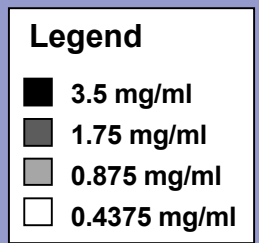
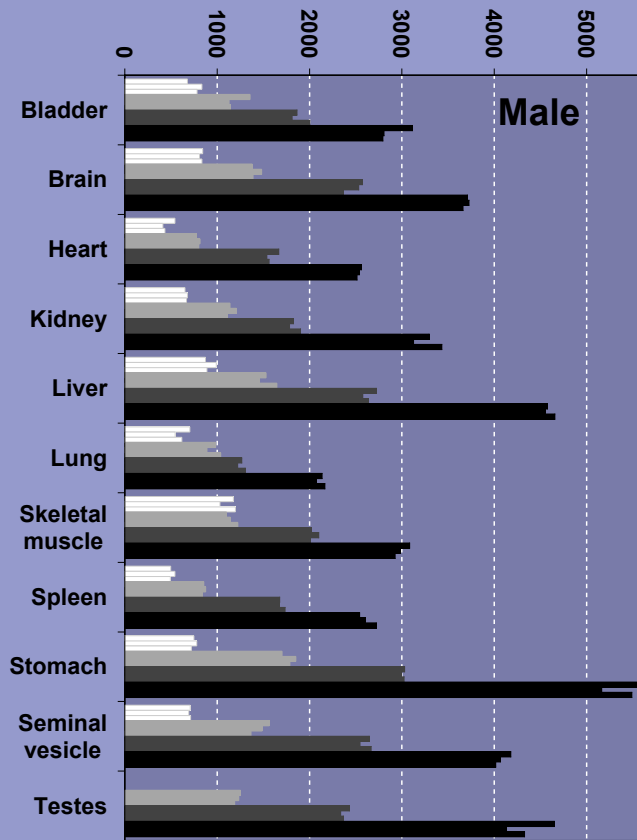
Spot Intensity (Arbitrary Units)



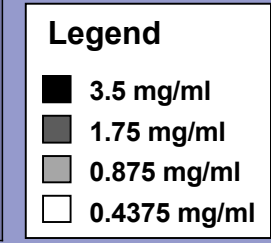
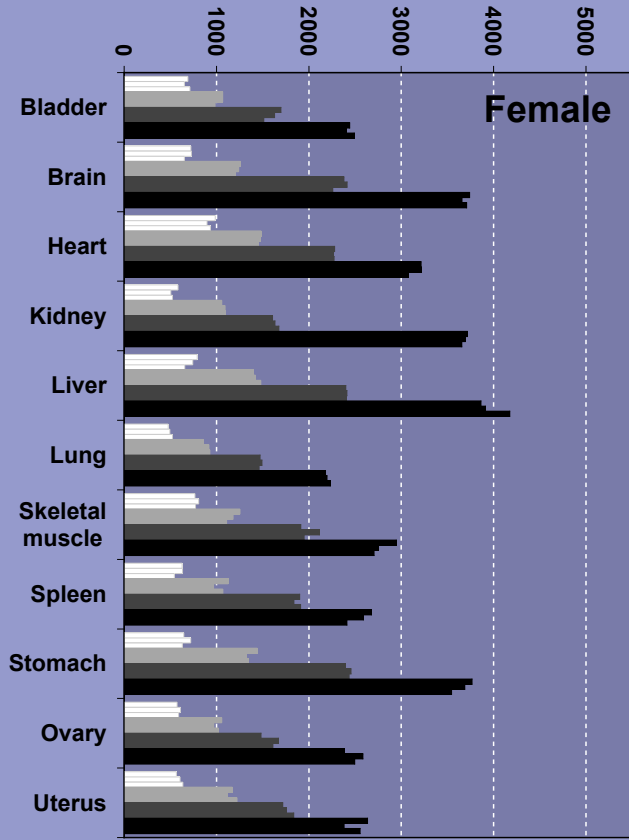
www.kinexus.ca

Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

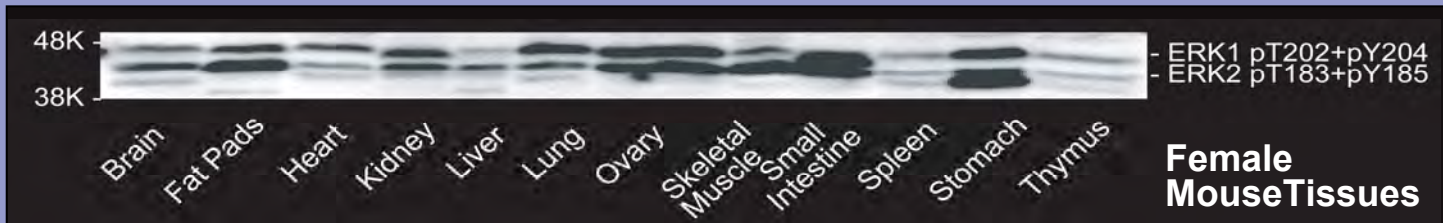
Mouse Tissues - Untreated



Spot Intensity (Arbitrary Units)



Spot Intensity (Arbitrary Units)

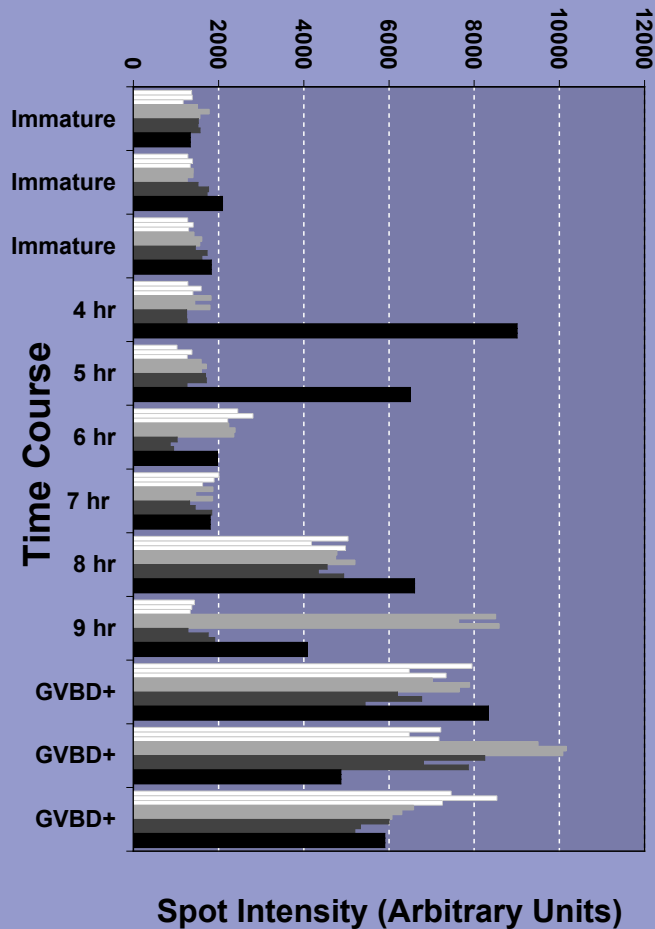


Female Mouse Tissues

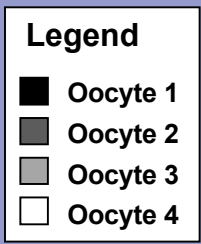
Extracellular Reg. Kinases 1/2 (ERK1/2) T202+Y204/T183+Y185 Phosphorylation

Primary Cell: *Xenopus laevis* Frog Oocyte - Stage VI

Treatment: Progesterone



The results from the microarray analysis of 48 individual frog oocytes are shown at only one dilution in triplicate. Note the high degree of variation in Erk2 phosphorylation despite the fact that all of the oocytes were from the same frog.



www.kinexus.ca

KINEXUS



Kinex™ Reverse Lysate Microarray KRLM-1.0