Protein Kinase Catalytic Domain Conservation

Most Evolutionary Conserved Protein Kinases

Kinase Name	Mouse	Rat	Dog	Chicken	Fly	Worm	Mustard Plant	Rice	Budding Yeast	Neurospora	SUM
Average Conserv.	89	89	91	77	50	47	43	44	41	44	615
CK2α1/CSNK2A1	98	98	100	97	88	78	75	76	59	70	839
AMPKα2/PRKAA2	97	98	98	90	60	58	46	46	42	80	715
GSK3β	96	96	99	95	70	74	63		54	62	709
p38α/MAPK14	95	99	95	96	68	62	45	46	52	49	707
CDK7	93	95	92	94	66	60	57	58	48	42	705
PKACβ/PRKACB	97	97	88	90	83	80	35		54	55	679
CDK5	99	99	99	98	79	74			55	60	663
CK1δ/CSNK1D	99	99	99	97	61		74	61		71	661
ERK2/MAPK1	99	99	96	98	81	81	50		50		654
CK1α/CSNK1A1	92	91	100	99	70	79	59	60			650
MAP2K1/MEK1	98	99	91	95	63	52	36	33	42	39	648
AurA/STK6	82	83	89	71	50	57	57	53	43	55	640
PAK1	97	98	96	94	51	53		49	45	40	623
FRAP/FRAP1	98	98	99	93	53	51	40	46	41		619
NDR2/STK38L	97		99	97	71	67	50	49	47	42	619
CK1ε/CSNK1E	98	99	99	95	84		63	74			612
PDHK3/PDK3	97	97	99	92	58	53	38	39		37	610
PKACα/PRKACA	98	98	98	95	82	83			48		602
CLK2	96	96	98	88	58	62	49			46	593
CDK11/CDC2L6	87	96	96	79	85	60	44	41			588
CDK9	98	98	98	90	73	51			41	34	583
NDR1/STK38	98	97	95	93	80	66	49				578
RIOK2	83	81	84	67	45	41	45	45	40	47	578
MST2/STK3	94	96	98	98	46	54	43	43			572
p70S6K/RPS6KB1	99	99	99	98	72	60	43				570
PKCε/PRKCE	97	98	98	82	57	57			46	33	568
PIK3R4	95	95	97	91	41	29	30	26	26	30	560
PRP4/PRPF4B	95	95	98	90	43	41	33	48			543
RIOK1	80	82	89	75	48	42	46		38	41	541
TRRAP	98	98	98	93	49	24	27		27	27	541
CaMKK2	89	92	91	74	54	55	40			45	540
CDK2	96	72	96		70			71	64	64	533
OSR1/OXSR1	95	95	97	86	56	52	49				530
PDK1/PDPK1	94	95	94	90	43	37	38	39			530
BRAF	99	87	93	89	45	40	33	42			528
AMPKα1/PRKAA1	96	96	98	83		58	50	46			527
JNK3/MAPK10	98	99	98	84	78	70					527
AKT2	98	97	97		61		40	39	49	45	526
NLK	99	99	99	98	76	54					525
CaMK2δ	92	92	91	68	74	67	39				523