

G Protein Alpha Subunits

Giα1	33	VKLLLLGAGESGKSTIVKQMKIIHEAGYSEEECKQYKAVVYSNT-----IQSIIAIIIRAMGRLKID
Goα1	33	VKLLLLGAGESGKSTIVKQMKIIHEDGFSGEDVKQYKPVVYSNT-----IQSLAAIVRAMDTLGIE
Gtα1	29	VKLLLLGAGESGKSTIVKQMKIIHQDGYSLLEECLEFIAIYGN-----LQSILAIIVRAMTTLNIQ
Gsα	41	HRLLLLGAGESGKSTIVKQMRIIHVNGFNNEGGEEDPQAARSNS-[15 aa]-KEAIIETIVAAMSNLVPP
G11α	40	LKLLLLGTGESGKSTFVKQMRIIHGAGYSEEDKRGFTKLVYQNI-----FTAMQAMIRAMETLKIL
G14α	36	LKLLLLGTGESGKSTFIKQMRIIHGSGYSDERDKGFTKLVYQNI-----FTAMQAMIRAMDTLRIQ
G15α	43	LKLLLLGPGESGKSTFIKQMRIIHGAGYSEERKGRFPLVYQNI-----FVSMRAMIEMERLQIP
G13α	49	VKLLLLGAGESGKSTFLKQMRIIHGQDFDQARAREEFRPTIYSNV-----IKGMRVLVDAREKLHHP
Giα1	94	[34 aa]-KRLWKDSGVQACFNRSREYQLNDSAAYYLNDLDRIAQPNYIPTQQDVLRLTRVKTGIV
Goα1	94	[35 aa]-MRLWGDSGIQECFNRSREYQLNDSAKYYLDSLDRIGAADYQPTQDILRTRVKTGIV
Gtα1	90	[34 aa]-QRLWKDSGIQACFERASEYQLNDSAGYYLSDLERLVTGYPTEQDVLRSRVKTTGII
Gsα	117	[34 aa]-KALWEDEGVRACYERSNEYQLIDCAQYFLDKIDVIKQADYVPSDQDLLRCRVLTSQIF
G11α	101	[32 aa]-KTLWEDPGIQECYDRRREYQLSDSAKYYLTDVDRIATLGLYPTQQDVLRRVPTTGII
G14α	97	[32 aa]-KQLWQDPGIQECYDRRREYQLSDSAKYYLTDIDRIATPSFVPTQQDVLRRVPTTGII
G15α	104	[32 aa]-QWLWRDAGIRACYERRREFHLLDSAVYYLSHLERITEEGYVPTAQDVLRSRMPPTGIN
G13α	110	[40 aa]-RALWADSGIQNAYDRRREFQLGESVKYFLDNLDKLGEPDYIPSQQDILLARRPTKGIH
Giα1	185	ETHFTFKDLHFKMFDVGGQRSEKRWIHC FEGVTAIIFCVALS DYDLVLA EDEEMNRMHE
Goα1	186	ETHFTFKNLHFRLLFDVGGQRSEKRWIHC FEDVTAIIFCVALSGYDQVLHEDETTNRMHE
Gtα1	181	ETQFSFKDLNFRMFDVGGQRSEKRWIHC FEGVTCIIFIAALSAYDMVLVEDDEVNRMHE
Gsα	209	ETKFQVDKVNFMFDVGGQRDERRKWIQC FNDVTAIIFVVASSSYNMVIREDNQTNRLQE
G11α	191	EYFPDENIIFRMVDVGGQRSEKRWIHC FENVTSIMFLVALSEYDQVLVESDNENRMEE
G14α	187	EYFPDENIIFRMVDVGGQRSEKRWIHC FESVTSIIFLVALSEYDQVLAECDNENRMEE
G15α	194	EYCFVQKTNLRIVDVGGQKSEKRWIHC FENVIALIYLAALS EYDQCLEENNQENRMKE
G13α	208	EYDFEIKNVPFKMVDVGGQRSEKRWIFEC FDSVTSILFLVSSSEFDQVVMEDRLTNRLTE
Giα1	245	SMKLFDSICNNKWFDTDSIILFLNKKDL FEEKIK--KSPLTICYPEYAG
Goα1	246	SLMLFDSICNNKFFIDTSIILFLNKKDL FGEKIK--KSPLTICFPEYTG
Gtα1	241	SLHLFNSICNHRYFATTSIVLFLNKKDV FFEKIK--KAHL SICFPDYDG
Gsα	269	ALNLFKSIWNNRWLRTISVILFLNKQD LLAEKVLAGKSKIEDYFPEFAR
G11α	251	SKALFRTIITYPWFQNSSVILFLNKKD LLEDKIL--YSHLVDFYFPEFDG
G14α	247	SKALFKTIITYPWFNSSVILFLNKKD LLEEKIM--YSHLISYFPEYTG
G15α	254	SLALFGTILELPWFKSTSVILFLNKTD ILEEKIP--TSHLATYFPSFQG
G13α	268	SLNIFETIVNNRVFSNVSIIILFLNKD LLEEKVQ--IVSIKDYFLEFEG
Giα1	292	[29 aa]-HFTCATDTKNVQFVFDVAVTDVIDK 344
Goα1	293	[28 aa]-HMTCATDTNNIQVVFDAVTDIIDA 344
Gtα1	288	[29 aa]-HMTCATDTQNVKVFDAVTDIIDK 340
Gsα	318	[43 aa]-HFTCAVDTENIRRVFNDCRDIIQR 385
G11α	298	[29 aa]-HFTCATDTENIRFVFAAVKDTILQ 350
G14α	294	[29 aa]-HFTCATDNDIRFVFAAVKDTILQ 346
G15α	301	[41 aa]-HYTCTTDTQIRKVFKDVDRSVLA 365
G13α	315	[30 aa]-HFTTINTENIRLVFRDVKDTILH 368

Rat G Protein Giα1
(residues 1-353, white)
PDB: 1ASO

