

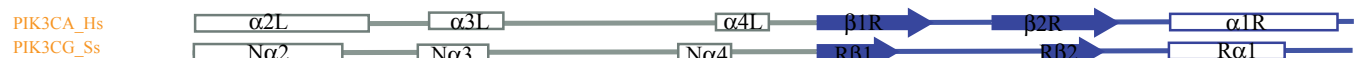
PIK3CA_Hs 1MPP.RPSSGELWGH...LMPP.RITLVECLLPLNG.....MIVTLECLREATLTITKHETFKEARQYPLHQLLQD
 PIK3CB_Hs 1MCFSPIMPPAMADILDIWAVDSQIASDGSIIVDFLLELTG.....IYIQLEVREATISYIKQMTLWQVHNYPMPFNLLMD
 PIK3CD_Hs 1MPPGVDCPMEFWTKE...ENQSVVDFLLELTG.....VYLNFPVSRNANLSTIKQITWHRAQYEPPLPHMLSG
 PIK3CG_Hs 1 MELENYKQPVVLLREDNCRRRRRMKPRFAASLSMSMLIIEFVLPSTQRKCKSPETALLHVAGHGVEQMKAVWLRALETSVSADFYH
 PIK3CG_Ss 1 MELENYEQPVVLLREDNRRRRRRMKPRFAASLSMSMLIIEFVLPSTQRNTKTPTETALLHVAGHGVEQMKAVWLRALETSVSADFYH



PIK3CA_Hs 65 ES...SYIFVSVTQEAERREFFFD...ETRRLCDLRLRFQPFLLKVIETVGN.....REEKILNREITGFATGMPVCEFDMLKDPDEVDFRR
 PIK3CB_Hs 75 ID...SYMFAVCVNLVAVYEELED...ETRRLCDVRFPLFLVLEKLVTRSCD.....QDVFVFOVSPNMMIKVNELAIKQLT
 PIK3CD_Hs 65 PE...AVVFTCLNQTAEQELED...EORRLCDVQVPLFLVLRVLRVREGD.....RVKKLINSQISLITGKGLHDFDLSLQDEVNDFRA
 PIK3CG_Hs 90 RLGPDPHFLLLYQKKGQYIEIDKYQVQVTDCLFYVNRVLRSPQCHLVVQRHPPSEESQAFQRQLTALICYDVTDVSNVHDDLELFTRR
 PIK3CG_Ss 90 RLGPDPHFLLLYQKKGQYIEIDKYQVQVTDCLFYVNRVLRSPQCHLVVQRHPPSEETLAFQRQLNALICYDVTDVSNVHDDLELFTRR



PIK3CA_Hs 142 NITLVNCKEAVDLRDLNSPHSRIMYVYPPNVESPELPHKIYNKLDKQGITVVIWVTVSPNNDKQKQYTLKINHDCVPEQVIAEAIRKKTTR
 PIK3CB_Hs 151 KMRKFESEKLLSLVGLSWMWLKQTYPEHEPESIPEN...LEDKLYGGKLLIVAVHFN...QDVFVFOVSPNMMIKVNELAIKQLT
 PIK3CD_Hs 142 KMCQFCEEAARRQQLGWEAWLQYSFPLQLPESQATWGPGLRLPNRALLVNPKFEGS...ESFTFOVSTKDVPLALMACALRKKAT
 PIK3CG_Hs 179 GLVTPRMAEAVASRD...PKLYAMHPW...VTSKPLPEYLWKKIANNCIFIVIHRS...TTSQTIKVSPPDTPGAALQSFFTKMAK
 PIK3CG_Ss 179 RLVTPRMAEAVASRD...PKLYAMHPW...VTSKPLPEYLLKKTNNCVFIVIHRS...TTSQTIKVSADDTPGAALQSFFTKMAK



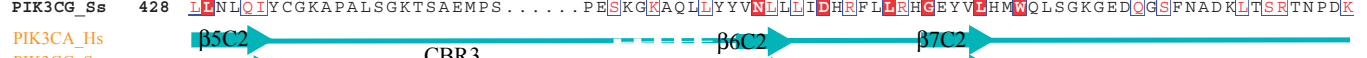
PIK3CA_Hs 231 SMLLSEQLKLCVLEFYQGYHLKVCDCDEYFLEKYPLSQYKYSITRSMITLGRMPNLMIMAKESLY...SQLPMDCFMPSYSRRIST..AT
 PIK3CB_Hs 234 IHGKEDV.....VSPYDYLQVSGRVEYVFGDHPLIQFOYIRCSLHVMNRALPHFLVVECKIK...KMYEQEMIAIEAANNRNSNLPL
 PIK3CD_Hs 227 VFRQPLV.....EQPEDYTLQVNGRHHYLYGSYPLCQFOYIRCSLHVMNRALPHFLVVECKIK...AMRDEQSNPAPOVQKPRK...PP
 PIK3CG_Hs 255 KKSLLMDIPES...QSEQDFVLRVCGRDEYLVGETPIKKNFQWVRQCLKNGEEIHVLLDTPPPALDEVRKKEEWPLVDDTGVGTGYHEQL
 PIK3CG_Ss 255 KKSLLMDIPES...QNERDFVLRVCGRDEYLVGETPIKKNFQWVRQCLKNGEEIHVLLDTPPPALDEVRKKEEWPLVDDTGVGTGYHEQL



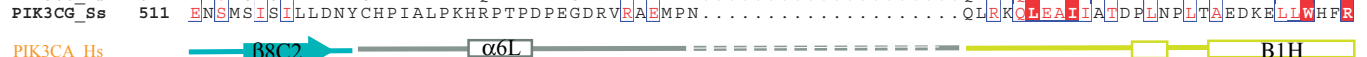
PIK3CA_Hs 316 PYM...NGETSTKSLVWVINSALRRIKILCATYVNVNIRRIDKIYVRTGIYHGEPELDCDNNVNTQVVP...CSNPVWNEWLNVDIYIPDLPRAA
 PIK3CB_Hs 314 PLP...PKKTRISHVWENNPFQIVLVKGNKLN...TEEVTKVHVRAAGLFGHTEMLCKTIVSSSEVSGKNDHWIWNPFLEFDTICDLPMA
 PIK3CD_Hs 305 PIP...AKKPSVSLWVSLQPFRIELIIGSKVN...ADERMKLVVQAGLFGHTEMLCKTIVSSSEVSGKNDHWIWNPFLEFDTICDLPMA
 PIK3CG_Hs 340 TIHGKDHESVFTVSLWDCDRKFRVKIRGIDIVPLVRRNTDLTVFEANIQYQGVQLCQRR...TSPKPFTEVLLWNVWLEFSTKTKDLPKGA
 PIK3CG_Ss 340 TIHGKDHESVFTVSLWDCDRKFRVKIRGIDIVPLVRRNTDLTVFEANIQYQGVQLCQRR...TSPKPFTEVLLWNVWLEFSTKTKDLPKGA



PIK3CA_Hs 401 RLCLSLICSVKGR.....KGAKEHCFPLAWGNLFLDYDLDLVSGKMALNLPVPHGLELLNPIGVTTGSPNPN..K
 PIK3CB_Hs 399 RLCFAYAVAVLDKVKTKSTKTINPSKYQTIKAGKVHYPIVAWNVDFKGLRTGDIILHSWSSFPDELEMLNPMGTVQTNPY..T
 PIK3CD_Hs 389 RLCFALYAVIEKAKKARSTK.....KSKKADCPFAWNLMLFDYKDKLTKTGERCLYMWSSVPDEKGLLNPTGTVRSNPN..T
 PIK3CG_Hs 428 LLNLQIYCGKAPALSSKASAESPS.....SESKGVQLLYVNLILLDHRFLLRGEEYVLLHMQISGKGEDQGSFNADKLTSA TNPDK
 PIK3CG_Ss 428 LLNLQIYCGKAPALSGKTS AEMPS.....PESEKGAQLLYVNLILLDHRFLLRGEEYVLLHMQISGKGEDQGSFNADKLTSTR TNPDK



PIK3CA_Hs 469 E.TPCTELEFDWFSS.VVKFPDMSVIEEHANWSVREAGFSYSHAGLSNRLARDNELRENDREQLKATSTRDPTSEITTEQEKDFTWHSR
 PIK3CB_Hs 486 ENATALHVKFPENKQPYYPFDKIIKAAEIASDSDS.....ANVSSRGGKKF.....LFLVLELIDRDDLSQLCENEMDLJWTLR
 PIK3CD_Hs 466 DSAALLICLPEVAPFPVYPALEKIDELG...RHSSEC.....VHVTEEE.....QLOLEALETATDPLNPLTAEDKELIWHFR
 PIK3CG_Hs 511 ENSMSISILLDNYPALPKHQPTDPPEGDRVRAEMP.....QLRKOLEALETATDPLNPLTAEDKELIWHFR
 PIK3CG_Ss 511 ENSMSISILLDNYPALPKHRPTDPPEGDRVRAEMP.....QLRKOLEALETATDPLNPLTAEDKELIWHFR



PIK3CA_Hs 556 HVC.VTIPETLPLKLLSVKWNRSRDEVAQMYCLVVD...WPP...ITKPEQAMELDDCNYPDPMVGRGFAVRCLEKYLTDDKLSQYHLQVQV
 PIK3CB_Hs 563 QDCREIFPQSLPKLLLSIKWNKLEDEVAQLQALQI...WPK...LPPREALBLDDFNYPDQYVREYAVGCLRQMSDEBLSQYHLQVQV
 PIK3CD_Hs 536 HEVQEHFPEALARLLLVTKWNKHEVAQMLYLCS...WPE...LPLVLSALBLDDFSFPCDCHVGSFAKLRKLTDDLDFQYHLQVQV
 PIK3CG_Hs 580 YES.LKHPKAYPKLFSVSKWQQEIVARTYQLAKREVVDQSA LDVGLTMQLLDCNFSDENVRAIAVOKLESLEDDDLVHLYLQVQV
 PIK3CG_Ss 580 YES.LKDPKAYPKLFSVSKWQQEIVARTYQLAKREVVDQSA LDVGLTMQLLDCNFSDENVRAIAVOKLESLEDDDLVHLYLQVQV



PIK3CA_Hs 639 LKYEQYLDNLEVRFLLKKALETNORIGFFFWHLRSEMHNK.TVSRQFGLLELSYCRAC.GMYLKHNLNROVEAMEKLNITDILK...QEK
 PIK3CB_Hs 646 LKYEPLDLCALSRFLERLALGNRRIGQTFFWHLRSEVHIP.AVSVQFGLVLEAYCRGSG.VGHMKVLSKQVEALNKLKTLLNSLTK...LNA
 PIK3CD_Hs 619 LKYESYLDNLEVRFLLKKALETNORIGFFFWHLRSEMHV.P.SVALRFGVLEAYCRGSG.THHMKVLMKQVEALSLLKALNDLDFVK...LSS
 PIK3CG_Hs 667 VKFEPYHDSALARFLKRGRLRNKRIGFFFWHLRSEIAQSRHYQORFAVLEAYLRGCGTAMLDHDFTOQVQVIMLOKVTLIDIKSLSAE
 PIK3CG_Ss 667 VKFEPYHDSALARFLKRGRLRNKRIGFFFWHLRSEIAQSRHYQORFAVLEAYLRGCGTAMLDHDFTOQVQVIMLOKVTLIDIKSLSAE



SUPPLEMENTARY INFORMATION

