Datasheet for ABIN7565076

PIK3 gamma Protein (AA 1-1102) (His tag)

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Overview

Quantity:	1 mg
Target:	PIK3 gamma (PIK3CG)
Protein Characteristics:	AA 1-1102
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIK3 gamma protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Pik3cg Protein expressed in mammalien cells.
Sequence:	MELENYEQPV VLREDNLRRR RRMKPRSAAG SLSSMELIPI EFVLPTSQRI SKTPETALLH VAGHGNVEQM KAQVWLRALE TSVAAEFYHR LGPDQFLLLY QKKGQWYEIY DRYQVVQTLD CLHYWKLMHK SPGQIHVVQR HVPSEETLAF QKQLTSLIGY DVTDISNVHD DELEFTRRRL VTPRMAEVAG RDAKLYAMHP WVTSKPLPDY LSKKIANNCI FIVIHRGTTS QTIKVSADDT PGTILQSFFT KMAKKKSLMN ISESQSEQDF VLRVCGRDEY LVGETPLKNF QWVRQCLKNG DEIHLVLDTP PDPALDEVRK EEWPLVDDCT GVTGYHEQLT IHGKDHESVF TVSLWDCDRK FRVKIRGIDI PVLPRNTDLT VFVEANIQHG QQVLCQRRTS PKPFAEEVLW NVWLEFGIKI KDLPKGALLN LQIYCCKTPS LSSKASAETP GSESKGKAQL LYYVNLLLID HRFLLRHGDY VLHMWQISGK AEEQGSFNAD KLTSATNPDK ENSMSISILL DNYCHPIALP KHRPTPDPEG DRVRAEMPNQ LRKQLEAIIA TDPLNPLTAE DKELLWHFRY ESLKHPKAYP KLFSSVKWGQ QEIVAKTYQL LARREIWDQS ALDVGLTMQL LDCNFSDENV RAIAVQKLES LEDDDVLHYL

Product Details

	LQLVQAVKFE PYHDSALARF LLKRGLRNKR IGHFLFWFLR SEIAQSRHYQ QRFAVILEAY LRGCGTAMLQ DFTQQVHVIE MLQKVTIDIK SLSAEKYDVS SQVISQLKQK LESLQNSNLP ESFRVPYDPG LKAGTLVIEK CKVMASKKKP LWLEFKCADP TVLSNETIGI IFKHGDDLRQ DMLILQILRI MESIWETESL DLCLLPYGCI STGDKIGMIE IVKDATTIAQ IQQSTVGNTG AFKDEVLNHW LKEKCPIEEK FQAAVERFVY SCAGYCVATF VLGIGDRHND NIMISETGNL FHIDFGHILG NYKSFLGINK ERVPFVLTPD FLFVMGSSGK KTSPHFQKFQ DVCVRAYLAL RHHTNLLIIL FSMMLMTGMP QLTSKEDIEY IRDALTVGKS EEDAKKYFLD QIEVCRDKGW TVQFNWFLHL VLGIKQGEKH SA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	PIK3 gamma (PIK3CG)
Alternative Name:	Pik3cg (PIK3CG Products)
Background:	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform (PI3-kinase subunit gamma) (PI3K-gamma) (PI3Kgamma) (PtdIns-3-kinase subunit gamma) (EC 2.7.1.137) (EC 2.7.1.153) (EC 2.7.1.154) (Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic

subunit gamma) (PtdIns-3-kinase subunit p110-gamma) (p110gamma) (Phosphoinositide-3-kinase catalytic gamma polypeptide) (Serine/threonine protein kinase PIK3CG) (EC 2.7.11.1) (p120-PI3K),FUNCTION: Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Links G-protein coupled receptor activation to PIP3 production. Involved in immune, inflammatory and allergic responses. Modulates leukocyte chemotaxis to inflammatory sites and in response to chemoattractant agents. May control leukocyte polarization and migration by regulating the spatial accumulation of PIP3 and by regulating the organization of F-actin formation and integrin-based adhesion at the leading edge. Controls motility of dendritic cells. Together with PIK3CD is involved in natural killer (NK) cell development and migration towards the sites of inflammation. Participates in T-lymphocyte migration. Regulates T-lymphocyte proliferation, activation and cytokine production. Together with PIK3CD participates in T-lymphocyte development. Required for B-lymphocyte development and signaling. Together with PIK3CD participates in neutrophil respiratory burst. Together with PIK3CD is involved in neutrophil chemotaxis and extravasation. Together with PIK3CB promotes platelet aggregation and thrombosis. Regulates alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) adhesive function in platelets downstream of P2Y12 through a lipid kinase activity-independent mechanism. May have also a lipid kinase activity-dependent function in platelet aggregation. Involved in endothelial progenitor cell migration. Negative regulator of cardiac contractility. Modulates cardiac contractility by anchoring protein kinase A (PKA) and PDE3B activation, reducing cAMP levels. Regulates cardiac contractility also by promoting beta-adrenergic receptor internalization by binding to GRK2 and by non-muscle tropomyosin phosphorylation. Also has serine/threonine protein kinase activity: both lipid and protein kinase activities are required for beta-adrenergic receptor endocytosis. May also have a scaffolding role in modulating cardiac contractility. Contribute to cardiac hypertrophy under pathological stress. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which the PI3K gamma complex is activated by RAPGEF3 and which is involved in angiogenesis (By similarity). {ECO:0000250|UniProtKB:P48736, ECO:0000269|PubMed:10669416, ECO:0000269|PubMed:10669418, ECO:0000269|PubMed:11054537, ECO:0000269|PubMed:12297047, ECO:0000269|PubMed:15294162, ECO:0000269|PubMed:15318168, ECO:0000269|PubMed:16116162, ECO:0000269|PubMed:16127437, ECO:0000269|PubMed:17673465, ECO:0000269|PubMed:19297623, ECO:0000269|PubMed:21474070, ECO:0000269|PubMed:31554793}.

Target Details

Molecular Weight:	126.4 kDa
UniProt:	Q9JHG7
Pathways:	PI3K-Akt Signaling, RTK Signaling, AMPK Signaling, TLR Signaling, Inositol Metabolic Process, Hepatitis C, VEGF Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

