Datasheet for ABIN7564423

PIK3CB Protein (AA 1-1064) (His tag)

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Overview

Quantity:	1 mg
Target:	PIK3CB
Protein Characteristics:	AA 1-1064
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIK3CB protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Pik3cb Protein expressed in mammalien cells.
Sequence:	MPPAMADNLD IWAVDSQIAS DGAISVDFLL PTGIYIQLEV PREATISYIK QMLWKQVHNY PMFNLLMDID SYMFACVNQT AVYEELEDET RRLCDVRPFL PVLKLVTRSC DPAEKLDSKI GVLIGKGLHE FDALKDPEVN EFRRKMRKFS EAKIQSLVGL SWIDWLKHTY PPEHEPSVLE NLEDKLYGGK LVVAVHFENS QDVFSFQVSP NLNPIKINEL AIQKRLTIRG KEDEASPCDY VLQVSGRVEY VFGDHPLIQF QYIRNCVMNR TLPHFILVEC CKIKKMYEQE MIAIEAAINR NSSNLPLPLP PKKTRVISHI WDNNNPFQIT LVKGNKLNTE ETVKVHVRAG LFHGTELLCK TVVSSEISGK NDHIWNEQLE FDINICDLPR MARLCFAVYA VLDKVKTKKS TKTINPSKYQ TIRKAGKVHY PVAWVNTMVF DFKGQLRSGD VILHSWSSFP DELEEMLNPM GTVQTNPYAE NATALHITFP ENKKQPCYYP PFDKIIEKAA ELASGDSANV SSRGGKKFLA VLKEILDRDP LSQLCENEMD LIWTLRQDCR ENFPQSLPKL LLSIKWNKLE DVAQLQALLQ IWPKLPPREA LELLDFNYPD QYVREYAVGC LRQMSDEELS QYLLQLVQVL KYEPFLDCAL SRFLLERALD

Product Details

	NRRIGQFLFW HLRSEVHTPA VSVQFGVILE AYCRGSVGHM KVLSKQVEAL NKLKTLNSLI KLNAVKLSRA KGKEAMHTCL KQSAYREALS DLQSPLNPCV ILSELYVEKC KYMDSKMKPL WLVYSSRAFG EDSVGVIFKN GDDLRQDMLT LQMLRLMDLL WKEAGLDLRM LPYGCLATGD RSGLIEVVST SETIADIQLN SSNVAATAAF NKDALLNWLK EYNSGDDLDR AIEEFTLSCA GYCVASYVLG IGDRHSDNIM VKKTGQLFHI DFGHILGNFK SKFGIKRERV PFILTYDFIH VIQQGKTGNT EKFGRFRQCC EDAYLILRRH GNLFITLFAL MLTAGLPELT SVKDIQYLKD SLALGKSEEE ALKQFKQKFD EALRESWTTK VNWMAHTVRK DYRS **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:	PIK3CB
Alternative Name:	Pik3cb (PIK3CB Products)
Background:	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform (PI3-kinase subunit beta) (PI3K-beta) (PI3Kbeta) (PtdIns-3-kinase subunit beta) (EC 2.7.1.153) (Phosphatidylinositol 4,5-bisphosphate 3-kinase 110 kDa catalytic subunit beta) (PtdIns-3-

Target Details

	kinase subunit p110-beta) (p110beta) (Serine/threonine protein kinase PIK3CB) (EC 2.7.11.1),FUNCTION: Phosphoinositide-3-kinase (PI3K) phosphorylates phosphatidylinositol (PI) derivatives at position 3 of the inositol ring to produce 3-phosphoinositides. Uses ATP and PtdIns(4,5)P2 (phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3) (By similarity). 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. Involved in the activation of AKT1 upon stimulation by G-protein coupled receptors (GPCRs) ligands such as CXCL12, sphingosine 1-phosphate, and lysophosphatidic acid. May also act downstream receptor tyrosine kinases. Required in different signaling pathways for stable platelet adhesion and aggregation. Plays a role in platelet activation signaling triggered by GPCRs, alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) and ITAM (immunoreceptor tyrosine-based activation motif)-bearing receptors such as GP6. Regulates the strength of adhesion of ITGA2B/ ITGB3 activated receptors necessary for the cellular transmission of contractile forces. Required for platelet aggregation induced by F2 (thrombin) and thromboxane A2 (TXA2). Has a role in cell survival. May have a role in cell migration. Involved in the early stage of autophagosome formation. Modulates the intracellular level of PtdIns3P (phosphatidylinositol 3-phosphate) and activates PIK3C3 kinase activity. May act as a scaffold, independently of its lipid kinase activity to positively regulate autophagy. May have a role in insulin signaling as scaffolding protein in which the lipid kinase activity is not required. May have a kinase-independent function in regulating cell proliferation and in clathrin-mediated endocytosis. Mediator of oncogenic signal in cell lines lacking PTEN. The lipid kinase activity is necessary for its role in oncogenic transformation. Required for the growth of ERBB2 and RAS driven tumors. Has also a protein kinase activity showing autophosphorylation. {ECO:0000250|UniProtKB:P42338, ECO:0000269|PubMed:18544649, ECO:0000269|PubMed:18594509, ECO:0000269|PubMed:19515725, ECO:0000269|PubMed:19940148, ECO:0000269|PubMed:20065293, ECO:0000269|PubMed:21059846}.
Molecular Weight:	121.7 kDa
UniProt:	Q8BTI9

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.

Application Details

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