Datasheet for ABIN3131339

PIK3R2 Protein (AA 1-722) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PIK3R2 (PI3K p85b)
Protein Characteristics:	AA 1-722
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIK3R2 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MAGAEGFQYR AVYPFRRERP EDLELLPGDL LVVSRVALQA LGVADGGERC PHNVGWMPGF NERTRQRGDF PGTYVEFLGP VALARPGPRP RGPRPLPARP LDGSSESGHI LPDLAEQFSP PDPAPPILVK LVEAIEQAEL DSECYSKPEL PATRTDWSLS DLEQWDRTAL YDAVKGFLLA LPAAVVTPEA AAEAYRALRE VAGPVGLVLE PPTLPLHQAL TLRFLLQHLG RVARRAPSPD TAVHALASAF GPLLLRIPPS GGEGDGSEPV PDFPVLLLER LVQEHVEEQD AAPPALPPKP SKAKPAPTAL ANGGSPPSLQ DAEWYWGDIS REEVNERLRD TPDGTFLVRD ASSKIQGEYT LTLRKGGNNK LIKVFHRDGH YGFSEPLTFC SVVELISHYR HESLAQYNAK LDTRLLYPVS KYQQDQVVKE DSIEAVGAQL KVYHQQYQDK SREYDQLYEE YTRTSQELQM KRTAIEAFNE TIKIFEEQGQ TQEKCSKEYL ERFRREGNEK EMQRILLNSE RLKSRIAEIH ESRTKLEQDL RAQASDNREI DKRMNSLKPD LMQLRKIRDQ YLVWLTQKGA RQRKINEWLG IKNETEDQYS LMEDEDALPH HEERTWYVGK INRTQAEEML SGKRDGTFLI RESSQRGCYA CSVVVDGDTK

	HCVIYRTATG FGFAEPYNLY GSLKELVLHY QHASLVQHND ALTVTLAHPV RAPGPGPPSA AR **Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • 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. 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. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	PIK3R2 (PI3K p85b)
Alternative Name:	Pik3r2 (PI3K p85b Products)
Background:	Phosphatidylinositol 3-kinase regulatory subunit beta (PI3-kinase regulatory subunit beta) (PI3K regulatory subunit beta) (PtdIns-3-kinase regulatory subunit beta) (Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta) (PI3-kinase subunit p85-beta) (PtdIns-3-kinase regulatory subunit p85-beta),FUNCTION: Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase 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. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (By similarity). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (PubMed:20348926). {ECO:0000250|UniProtKB:O00459, ECO:0000269|PubMed:20348926}.
Molecular Weight:	81.3 kDa
UniProt:	O08908
Pathways:	VEGF Signaling, BCR 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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

Application Details

	During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months