Datasheet for ABIN3094883

RAB3GAP2 Protein (AA 1-1393) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	RAB3GAP2
Protein Characteristics:	AA 1-1393
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAB3GAP2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MACSIVQFCY FQDLQAARDF LFPHLREEIL SGALRRDPSK STDWEDDGWG AWEENEPQEP EEEGNTCKTQ KTSWLQDCVL SLSPTNDLMV IAREQKAVFL VPKWKYSDKG KEEMQFAVGW SGSLNVEEGE CVTSALCIPL ASQKRSSTGR PDWTCIVVGF TSGYVRFYTE NGVLLLAQLL NEDPVLQLKC RTYEIPRHPG VTEQNEELSI LYPAAIVTID GFSLFQSLRA CRNQVAKAAA SGNENIQPPP LAYKKWGLQD IDTIIDHASV GIMTLSPFDQ MKTASNIGGF NAAIKNSPPA MSQYITVGSN PFTGFFYALE GSTQPLLSHV ALAVASKLTS ALFNAASGWL GWKSKHEEEA VQKQKPKVEP ATPLAVRFGL PDSRRHGESI CLSPCNTLAA VTDDFGRVIL LDVARGIAIR MWKGYRDAQI GWIQTVEDLH ERVPEKADFS PFGNSQGPSR VAQFLVIYAP RRGILEVWST QQGPRVGAFN VGKHCRLLYP GYKIMGLNNV TSQSWQPQTY QICLVDPVSG SVKTVNVPFH LALSDKKSER AKDMHLVKKL AALLKTKSPN LDLVETEIKE LILDIKYPAT KKQALESILA SERLPFSCLR NITQTLMDTL KSQELESVDE GLLQFCANKL KLLQLYESVS QLNSLDFHLD TPFSDNDLAL LLRLDEKELL KLQALLEKYK QENTRTNVRF SDDKDGVLPV KTFLEYLEYE

KDVLNIKKIS EEEYVALGSF FFWKCLHGES STEDMCHTLE SAGLSPQLLL SLLLSVWLSK EKDILDKPQS ICCLHTMLSL LSKMKVAIDE TWDSQSVSPW WQQMRTACIQ SENNGAALLS AHVGHSVAAQ ISNNMTEKKF SQTVLGADSE ALTDSWEALS LDTEYWKLLL KQLEDCLILQ TLLHSKGNTQ TSKVSSLQAE PLPRLSVKKL LEGGKGGIAD SVAKWIFKQD FSPEVLKLAN EERDAENPDE PKEGVNRSFL EVSEMEMDLG AIPDLLHLAY EQFPCSLELD VLHAHCCWEY VVQWNKDPEE ARFFVRSIEH LKQIFNAHVQ NGIALMMWNT FLVKRFSAAT YLMDKVGKSP KDRLCRRDVG MSDTAMTSFL GSCLDLLQIL MEADVSRDEI QVPVLDTEDA WLSVEGPISI VELALEQKHI HYPLVEHHSI LCSILYAVMR FSLKTVKPLS LFDSKGKNAF FKDLTSIQLL PSGEMDPNFI SVRQQFLLKV VSAAVQAQHS ATKVKDPTEE ATPTPFGKDQ DWPALAVDLA HHLQVSEDVV RRHYVGELYN YGVDHLGEEA ILQVHDKEVL ASQLLVLTGQ RLAHALLHTQ TKEGMELLAR LPPTLCTWLK AMDPQDLQNT EVPIATTAKL VNKVIELLPE KHGQYGLALH LIEAVEAISL PSL

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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

Product Details

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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	RAB3GAP2
Alternative Name:	RAB3GAP2 (RAB3GAP2 Products)
Background:	Rab3 GTPase-activating protein non-catalytic subunit (RGAP-iso) (Rab3 GTPase-activating protein 150 kDa subunit) (Rab3-GAP p150) (Rab3-GAP150) (Rab3-GAP regulatory subunit),FUNCTION: Regulatory subunit of the Rab3 GTPase-activating (Rab3GAP) complex composed of RAB3GAP1 and RAB3GAP2, which has GTPase-activating protein (GAP) activity towards various Rab3 subfamily members (RAB3A, RAB3B, RAB3C and RAB3D), RAB5A and RAB43, and guanine nucleotide exchange factor (GEF) activity towards RAB18 (PubMed:9733780, PubMed:24891604). As part of the Rab3GAP complex, acts as a GAP for Rab3 proteins by converting active RAB3-GTP to the inactive form RAB3-GDP (By similarity). Rab3 proteins are involved in regulated exocytosis of neurotransmitters and hormones (By similarity). The Rab3GAP complex, acts as a GEF for RAB18 by promoting the conversion of

Target Details

	inactive RAB18-GDP to the active form RAB18-GTP (PubMed:24891604). Required for recruiting and activating RAB18 at the endoplasmic reticulum (ER) membrane where it maintains proper ER structure (PubMed:24891604). Required for normal eye and brain development (By similarity). May participate in neurodevelopmental processes such as proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters (By similarity). {ECO:0000250|UniProtKB:Q15042, ECO:0000269|PubMed:24891604, ECO:0000269|PubMed:9733780}.
Molecular Weight:	156.0 kDa
UniProt:	Q9H2M9

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. 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process