

Datasheet for ABIN3115212

GRAMD1B Protein (AA 1-738) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	GRAMD1B
Protein Characteristics:	AA 1-738
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRAMD1B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MKGFKLSCTA SNSNRSTPAC SPILRKRSRS PTPQNQDGD T MVEKGSDHSS DKSPSTPEQG</p> <p>VQRSCSSQSG RSGGKNSKKS QSWYNVLSPT YKQRNEDFRK LFKQLPDTER LIVDYSCALQ</p> <p>RDILLQGRLY LSENWICFYS NIFRWETLLT VRLKDICSMT KEKTARLIPN AIQVCTDSEK</p> <p>HFFTSFGARD RTYMMMFRLW QNALLEKPLC PKELWHFVHQ CYGNELGLTS DDEDYVPPDD</p> <p>DFNTMGYCEE IPVEENEVND SSSKSSIETK PDASPQLPKK SITNSTLTST GSSEAPVSFD</p> <p>GLPLEEEALE GDGSLEKELA IDNIMGEKIE MIAPVNSPSL DFNDNEDIPT ELSDSSDTHD</p> <p>EGEVQAFYED LSGRQYVNEV FNFSVDKLYD LLFTNSPFQR DFMEQRRFSD IIFHPWKKEE</p> <p>NGNQSRVILY TITLTNPLAP KTATVRETQT MYKASQESEC YVIDAEVLTH DVPYHDYFYT</p> <p>INRYLTRVA RNKSRLRVST ELRYRKQPWG LVKTFIEKNF WSGLEDYFRH LESELAKTES</p> <p>TYLAEMHRQS PKEKASKTTT VRRRKRPDAH LRVPHLEEVN SPVTTPTDED VGHRIKHVAG</p> <p>STQTRHIPED TPNGFHLQSV SKLLLVISCV ICFSLVLLVI LNMMLFYKLW MLEYTTQTLT</p>

AWQGLRLQER LPQSQTEWAQ LLESQQKYHD TELQKWREII KSSVMLLDQM KDSLINLQNG
IRSRDYTSES EEKRNRYH

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: GRAMD1B

Alternative Name: GRAMD1B ([GRAMD1B Products](#))

Background: Protein Aster-B (GRAM domain-containing protein 1B),FUNCTION: Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma membrane (PM) to the endoplasmic reticulum (ER) (By similarity). Contains unique domains for binding cholesterol and the PM, thereby serving as a molecular bridge for the transfer of cholesterol from the PM to the ER (By similarity). Plays a crucial role in cholesterol homeostasis in the adrenal gland and has the unique ability to localize to the PM based on the level of membrane cholesterol (By similarity). In lipid-poor conditions localizes to the ER membrane and in response to excess cholesterol in the PM is recruited to the endoplasmic reticulum-plasma membrane contact sites (EPCS) which is mediated by the GRAM domain (By similarity). At the EPCS, the sterol-binding VAST/ASTER domain binds to the cholesterol in the PM and facilitates its transfer from the PM to ER (By similarity). {ECO:0000250|UniProtKB:Q80TI0}.

Molecular Weight: 85.4 kDa

UniProt: [Q3KR37](#)

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

Application Details

	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