

Datasheet for ABIN3117255

GRAMD1A Protein (AA 1-724) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	GRAMD1A
Protein Characteristics:	AA 1-724
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRAMD1A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MFDTTPHSGR STPSSSPSLR KRLQLLPPSR PPPEPEPGTM VEKGSDDSSSE KGGVPGTPST</p> <p>QSLGSRNFIR NSKKMQSWYS MLSPTYKQRN EDFRKLFSKL PEAERLIVDY SCALQREILL</p> <p>QGRLYLSEW ICFYSNIFRW ETTISIQKE VTCLKKEKTA KLIPNAIQIC TESEKHFFTS</p> <p>FGARDRCFLL IFRLWQNALL EKTLSPRELW HLVHQCYGSE LGTSEDEDY VSPLQLNGLG</p> <p>TPKEVGDVIA LSDITSSGAA DRSQEPSPVG SRRGHVTPNL SRASSDADHG AEEDKEEQVD</p> <p>SQPDASSQT VTPVAEPPST EPTQPDGPTT LGPLDLLPSE ELLTDTSNSS SSTGEEADLA</p> <p>ALLPDLGRL LINSVFHVGA ERLQQMLFSD SPFLQGFLQQ CKFTDVTLS WSGDSKCHQR</p> <p>RVLTYTIPIS NPLGPKSASV VETQTLFRRG PQAGGCVVDS EVLTQGIPYQ DYFYTAHRYC</p> <p>ILGLARNKAR LRVSEIRYR KQPWSLVKSL IEKNSWSGIE DYFHHLEREL AKAEKLSLEE</p> <p>GGKDARGLLS GLRRRRKRPLS WRAHGDGPQH PDPDPCARAG IHTSGSLSSR FSEPSVDQGP</p> <p>GAGIPSALVL ISIVICVSLI ILIALNVLLF YRLWSLERTA HTFESWHS LA KGKFPQTA</p>

TEWAEILALQ KQFHSVEVHK WRQILRASVE LLDEMKFSLE KLHQGITVSD PPFDTQPRPD DSFS

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: GRAMD1A

Alternative Name: GRAMD1A ([GRAMD1A Products](#))

Background: Protein Aster-A (GRAM domain-containing protein 1A),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 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). May play a role in tumor progression (By similarity). Plays a role in autophagy regulation and is required for biogenesis of the autophagosome (PubMed:31222192). This function in autophagy requires its cholesterol-transfer activity (PubMed:31222192). {ECO:0000250|UniProtKB:Q8VEF1, ECO:0000269|PubMed:31222192}.

Molecular Weight: 80.7 kDa

UniProt: [Q96CP6](#)

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.

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Application Details

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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