

# Datasheet for ABIN7548221

## GRAMD1A Protein (AA 1-724) (His tag)



### Overview

Quantity:	1 mg
Target:	GRAMD1A
Protein Characteristics:	AA 1-724
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRAMD1A protein is labelled with His tag.

#### **Product Details**

Purpose:	Custom-made recombinant GRAMD1A Protein expressed in mammalian cells.
Sequence:	MFDTTPHSGR STPSSSPSLR KRLQLLPPSR PPPEPEPGTM VEKGSDSSSE KGGVPGTPST
	QSLGSRNFIR NSKKMQSWYS MLSPTYKQRN EDFRKLFSKL PEAERLIVDY SCALQREILL
	QGRLYLSENW ICFYSNIFRW ETTISIQLKE VTCLKKEKTA KLIPNAIQIC TESEKHFFTS
	FGARDRCFLL IFRLWQNALL EKTLSPRELW HLVHQCYGSE LGLTSEDEDY VSPLQLNGLG
	TPKEVGDVIA LSDITSSGAA DRSQEPSPVG SRRGHVTPNL SRASSDADHG AEEDKEEQVD
	SQPDASSSQT VTPVAEPPST EPTQPDGPTT LGPLDLLPSE ELLTDTSNSS SSTGEEADLA
	ALLPDLSGRL LINSVFHVGA ERLQQMLFSD SPFLQGFLQQ CKFTDVTLSP WSGDSKCHQR
	RVLTYTIPIS NPLGPKSASV VETQTLFRRG PQAGGCVVDS EVLTQGIPYQ DYFYTAHRYC
	ILGLARNKAR LRVSSEIRYR KQPWSLVKSL IEKNSWSGIE DYFHHLEREL AKAEKLSLEE
	GGKDARGLLS GLRRRKRPLS WRAHGDGPQH PDPDPCARAG IHTSGSLSSR FSEPSVDQGP
	GAGIPSALVL ISIVICVSLI ILIALNVLLF YRLWSLERTA HTFESWHSLA LAKGKFPQTA
	TEWAEILALQ KQFHSVEVHK WRQILRASVE LLDEMKFSLE KLHQGITVSD PPFDTQPRPD DSFS

	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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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, anti-tag ELISA, 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

#### **Target Details**

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:

We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

12 months

#### Handling

Expiry Date:

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.