

Datasheet for ABIN3136875

Golgin A2 (GOLGA2) (AA 1-999) protein (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Golgin A2 (GOLGA2)
Protein Characteristics:	AA 1-999
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MWPPRFPPPR PGMSEETRQS KLAAAKKKLR EYQKNSPGV PAGAKKKKKI KNGHSPERPT ASDCQSPENV PTDHIAPAPP TAATDTMFLG VTPSPDADLT QSHDAGNCSN LMEETKTFSS TESLRQLSQQ LNGLVSESTS YINGEGLTSS NMKELENRYQ ELAVALDSSY VTNKQLSSTI EELKQQNQDT LDQLEKEKGD YQQKLAKEQG SLREQLQVHI QTIGILVSEK AELQTALAHT QQAARQKAGE SEDLASRLQS SRQRVGELER TLSTVSTQQK QADRYNKDLT KERDALKLEL YKNSKSNEDL RQQNSELEEK LRVLVAEKAA AQLGVEELQK KLEMSELLQ QFSSQSSAAG GNEQLQHAME ERAQLETHVS QLMESLKQLQ VERDQYAENL KGESAMWQQR VQQMAEQVHT LKEEKEHRER QVQELETSLA ALRSQMEEPP PPEPPAGPSE AEEQLQGEVE QLHKELERLT GQLRAQVQDN ESLSHLNREQ EGRLLLELRE AQRWSEQAEE RKQILESMQS DRTTISRALS QNRELKEQLA ELQNGFVRLT NENMEITSAL QSEQHVKKEL ARKLGELQER LGELKETVEL KSQEAQGLQE QRDQCLSHLQ QYAAAYQQHL AAYEQLTSEK EAIHKQLLLQ TQLMDQLQHE EVQGKMAAEL ARQELQEAQE RLKATSQENQ QLQAQLSLLV LPGEQDQDQE EDEEVPQSS
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LAIPEDLDSR EAMVAFFNAA IARAEQQAR LRVQLKEQKA RCRSLSHLAA PVQSKLEKEA
VVPRNVDDSA SEESNQALHV AMEKLQSRFL EVMQEKVELK ERVEELEHCC IQLSGETDTI
GEYIALYQNN RAVLKARHLE KEEYISRLAQ DKEEMKVKLL ELQELVLRV NERNEWQGKF
LAVSQNPGDV LTPVPTGSQE FGAADQDDL REVSLADDIE PAQGEAGVPA PHENPTAQQI
MQLLREIQNP RERPGLGSP CIPFFYRADE NDEVKIMVV

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Golga2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	Golgin A2 (GOLGA2)
Alternative Name:	Golga2 (GOLGA2 Products)
Background:	<p>Peripheral membrane component of the cis-Golgi stack that acts as a membrane skeleton that maintains the structure of the Golgi apparatus, and as a vesicle tether that facilitates vesicle fusion to the Golgi membrane. Together with p115/USO1 and STX5, involved in vesicle tethering and fusion at the cis-Golgi membrane to maintain the stacked and inter-connected structure of the Golgi apparatus. Plays a central role in mitotic Golgi disassembly: phosphorylation at Ser-37 by CDK1 at the onset of mitosis inhibits the interaction with p115/USO1, preventing tethering of COPI vesicles and thereby inhibiting transport through the Golgi apparatus during mitosis. Also plays a key role in spindle pole assembly and centrosome organization (By similarity). Promotes the mitotic spindle pole assembly by activating the spindle assembly factor TPX2 to nucleate microtubules around the Golgi and capture them to couple mitotic membranes to the spindle: upon phosphorylation at the onset of mitosis, GOLGA2 interacts with importin-alpha via the nuclear localization signal region, leading to recruit importin-alpha to the Golgi membranes and liberate the spindle assembly factor TPX2 from importin-alpha. TPX2 then activates AURKA kinase and stimulates local microtubule nucleation. Upon filament assembly, nascent microtubules are further captured by GOLGA2, thus linking Golgi membranes to the spindle (By similarity). Regulates the meiotic spindle pole assembly, probably via the same mechanism (PubMed:21552007). Also regulates the centrosome organization (By similarity). Also required for the Golgi ribbon formation and glycosylation of membrane and secretory proteins (By similarity).</p> <p>{ECO:0000250 UniProtKB:Q08379, ECO:0000250 UniProtKB:Q62839, ECO:0000269 PubMed:21552007}.</p>
Molecular Weight:	114.2 kDa Including tag.
UniProt:	Q921M4
Pathways:	SARS-CoV-2 Protein Interactome

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:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
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