

# Datasheet for ABIN7564850

# Golgin A2 (GOLGA2) (AA 1-999) protein (His tag)



## Overview

Quantity:	1 mg
Target:	Golgin A2 (GOLGA2)
Protein Characteristics:	AA 1-999
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag

### **Product Details**

Purpose:	Custom-made recombinant Golga2 Protein expressed in mammalian cells.
Sequence:	MWPPRFPPPR PGMSEETRQS KLAAAKKKLR EYQQKNSPGV PAGAKKKKKI KNGHSPERPT
	ASDCQSPENV PTDHIAPAPP TAATDTMFLG VTPSPDADLT QSHDAGNCSN LMEETKTFSS
	TESLRQLSQQ LNGLVSESTS YINGEGLTSS NMKELENRYQ ELAVALDSSY VTNKQLSSTI
	EELKQQNQDT LDQLEKEKKD YQQKLAKEQG SLREQLQVHI QTIGILVSEK AELQTALAHT
	QQAARQKAGE SEDLASRLQS SRQRVGELER TLSTVSTQQK QADRYNKDLT KERDALKLEL
	YKNSKSNEDL RQQNSELEEK LRVLVAEKAA AQLGVEELQK KLEMSELLLQ QFSSQSSAAG
	GNEQLQHAME ERAQLETHVS QLMESLKQLQ VERDQYAENL KGESAMWQQR VQQMAEQVHT
	LKEEKEHRER QVQELETSLA ALRSQMEEPP PPEPPAGPSE AEEQLQGEVE QLHKELERLT
	GQLRAQVQDN ESLSHLNREQ EGRLLELERE AQRWSEQAEE RKQILESMQS DRTTISRALS
	QNRELKEQLA ELQNGFVRLT NENMEITSAL QSEQHVKKEL ARKLGELQER LGELKETVEL
	KSQEAQGLQE QRDQCLSHLQ QYAAAYQQHL AAYEQLTSEK EAIHKQLLLQ TQLMDQLQHE
	EVQGKMAAEL ARQELQEAQE RLKATSQENQ QLQAQLSLLV LPGEGDVDQE EEDEEVPQSS

LAIPEDLDSR EAMVAFFNAA IARAEEEQAR LRVQLKEQKA RCRSLSHLAA PVQSKLEKEA

VVPRNVDDSA SEESNQALHV AMEKLQSRFL EVMQEKVELK ERVEELEHCC IQLSGETDTI

GEYIALYQNQ RAVLKARHLE KEEYISRLAQ DKEEMKVKLL ELQELVLRLV NERNEWQGKF

LAVSQNPGDV LTPVPTGSQE FGAADQQDDL REVSLADDIE PAQGEAGVPA PHENPTAQQI

MQLLREIQNP RERPGLGSNP CIPFFYRADE NDEVKIMVV 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:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · 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.

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:	Golgin A2 (GOLGA2)
Alternative Name:	Golga2 (GOLGA2 Products)
Background:	Golgin subfamily A member 2 (130 kDa cis-Golgi matrix protein) (GM130),FUNCTION:
	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 thether that facilitates vesicle

fusion to the Golgi membrane (PubMed:28028212). Required for normal protein transport from the endoplasmic reticulum to the Golgi apparatus and the cell membrane (PubMed:28028212). 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). {ECO:0000250|UniProtKB:Q08379, ECO:0000250|UniProtKB:Q62839, ECO:0000269|PubMed:21552007, ECO:0000269|PubMed:28028212}.

Molecular Weight:	113.3 kDa
UniProt:	Q921M4
Pathways:	SARS-CoV-2 Protein Interactome

#### **Application Details**

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
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.

# Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months