

Recombinant Rat ARFG2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52464

Size: 10ug, 100ug

Protein Name: ADP-ribosylation factor GTPase-activating protein 2 (ARF GAP 2) (Zinc finger protein 289)

Synonym: Arfgap2, Zfp289, Znf289

UniProt ID: Q3MID3

UniProt Link: www.uniprot.org/uniprotkb/Q3MID3/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 520 AA

Molecular Weight: 57 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAAGPSKSEIQTFLFKRLRAIPTNKACFDCGAKSPSWASITYGVFLCIDCSGVHRS LGVHLSFIRSTEL
DSNWSWLQLRCMQVGGNANATAFFRQHGCLANDANTKYNSRAAQMYREKIRQLGSTALARHGTD
LWIDNMNSAPSHSPEKKDSDFTEHTQAPAWDTAATDPSGTQQPALPSESSSLAQPEPGPNTDLLG
TSPQASLELKSSIIGKKKPAAAKKGLGAKKGLGAQKVSNSQSFTEIERQAQVAEKLREQQAADAKKQA
EESMVASMLAYQELQIDRKKEEKKLQNLGKKREQAERLGMGLVSRSSISHSVLSEMQMIEQETP
LSAKSSRSQLDLFDDVGTFA SGPPKYKDNPFSLGETFGSRWDSDAAWGMDRVEEKEPEVTISSIRPI
SERTTSRREVESRISGLESSEARQKFAGAKAISSDMFFGREVDSEYEARSRLQQLSGSSAISSSDLF
GDVDGAHGGGTVSLGNVLP TADIAQFKQGVKSVAGKMAVLANGVMNSLQDRYGSY

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant ADP-ribosylation factor GTPase-activating protein 2 (ARF GAP 2) (Zinc finger protein 289) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: GTPase-activating protein (GAP) for ADP ribosylation factor 1 (ARF1), which is essential for COPI vesicle formation and retrograde transport between the Golgi and the endoplasmic reticulum (PubMed:19015319). Hydrolysis of ARF1-bound GTP leads to dissociation of coatomer from Golgi-derived membranes to allow fusion with target membranes (By similarity). Promotes the proper assembly of the COPI coat lattice, rather than just acting as a simple curvature-dependent GAP like ARFGAP1 (By similarity). Also acts as a regulator of STING1 activity, both by promoting cytokine secretion in certain cell types and promoting the proton channel activity of STING1 in the trans-Golgi (By similarity).

Subcellular Localization: Golgi apparatus membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasm . Note=Also found on peripheral punctate structures likely to be endoplasmic reticulum-Golgi intermediate compartment.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.