

Recombinant Mouse IFIT3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52063

Size: 10ug, 100ug

Protein Name: Interferon-induced protein with tetratricopeptide repeats 3 (IFIT-3)
(Glucocorticoid-attenuated response gene 49 protein) (GARG-49) (P49) (IRG2)

Synonym: Ifit3, Garg49, Ifi49, Isg49

UniProt ID: Q64345

UniProt Link: www.uniprot.org/uniprotkb/Q64345/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 403 AA

Molecular Weight: 47 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSEVNRESLEAILPQLKCHFTWNLFREGSMSSHMEDRVCNQVEHLNSEEKATMYDLLAYIKHLDGE
SKAALECLGQAEDLRKSEHNDQSEIRRLVTWGN YAWIYYHMGRLSEAQAYVDKVRQVCQKFANPY
SMECELECEEGWTRLKCGRNERAKMCFEKALEEKPDPCESSGMAIAMFRLEEKPEKQFSVDAL
KQAMELNPNQNYLKVLLALKLLRMGEEAEGERLIKDALGKAPNQTDVLQKAAQFYKKKGNDRAIEL
LGKALRSTVNNSPLYSLVMCRYREILEQLQNKGDADSSERRQRMAELRRLTMEFMQKTLQRRRSPL
NSYSDLIDFPEVERCYQMVISKESPDVEEDLYERYCNLQEYHRKSEDLAALECLLQFPRNERSIEKE
EVKEQT

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 Interferon-induced protein with tetratricopeptide repeats 3 (IFIT-3) (Glucocorticoid-attenuated response gene 49 protein) (GARG-49) (P49) (IRG2) 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: IFN-induced antiviral protein which acts as an inhibitor of cellular as well as viral processes, cell migration, proliferation, signaling, and viral replication. Enhances MAVS-mediated host antiviral responses by serving as an adapter bridging TBK1 to MAVS which leads to the activation of TBK1 and phosphorylation of IRF3 and phosphorylated IRF3 translocates into nucleus to promote antiviral gene transcription. Exhibits an antiproliferative activity via the up-regulation of cell cycle negative regulators CDKN1A/p21 and CDKN1B/p27. Normally, CDKN1B/p27 turnover is regulated by COPS5, which binds CDKN1B/p27 in the nucleus and exports it to the cytoplasm for ubiquitin-dependent degradation. IFIT3 sequesters COPS5 in the cytoplasm, thereby increasing nuclear CDKN1B/p27 protein levels. Up-regulates CDKN1A/p21 by down-regulating MYC, a repressor of CDKN1A/p21. Can negatively regulate the apoptotic effects of IFIT2 (By similarity).

Subcellular Localization: Cytoplasm . Mitochondrion .

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.