

Recombinant Human MX1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50687

Size: 10ug, 100ug

Protein Name: Interferon-induced GTP-binding protein Mx1 (Interferon-induced protein p78) (IFI-78K) (Interferon-regulated resistance GTP-binding protein MxA) (Myxoma resistance protein 1) (Myxovirus resistance protein 1) [Cleaved into: Interferon-induced GTP-binding protein Mx1, N-terminally processed]

Synonym: MX1

UniProt ID: P20591

UniProt Link: www.uniprot.org/uniprotkb/P20591/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 662 AA

Molecular Weight: 76 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVVSEVDIAKADPAAASHPLLLNGDATVAQKNPGSVAENNLCSQYEEKVRPCIDLIDSLRALGVEQD
LALPAIAVIGDQSSGKSSVLEALSGVALPRGSGIVTRCPLVLKLLKLVNEDKWRGKVSQDYIEISDA
SEVEKEINKAQNAIAGEGMGISHELITLEISSRDVDPDLTLIDLPGITRVAVGNQPADIGYKIKTLIKKYIQR
QETISLVVPSNVDIATTEALSMAQEVDPEGDRITIGILTKPDLVDKGTEDKVVDVVRNLVFLKKGMI
VKCRGQQEIQDQLSLSEALQREKIFFENHPYFRDLLLEEGKATVPCLAEKLTSELITHICKSLPLENQIK
ETHQRITEELQKYGVDIPEDENEKMFLLIDKVNAFNQDITALMQGEETVGEEDIRLFTLRHEFHKWS
TIIENNFQEGHKILSRKIQKFENQYRGRELPGFVNYRTFETIVKQKIKALEEPAVDMLHTVTDMVRLAF
TDVSIKNFEEFFNLHRTAKSKIEDIRAEQEREKEKLIRLHFQMEQIVYCQDQVYRGALQKVREKELEE
EKKKKSWDFGAFQSSSATDSSMEEIFQHLMAYHQEASKRISSHIPLIIQFFMLQTYGQQLQKAMLQLL
QDKDTYSWLLKERSDTSKRRKFLKERLARLTQARRRLAQFPG

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 GTP-binding protein Mx1 (Interferon-induced protein p78) (IFI-78K) (Interferon-regulated resistance GTP-binding protein MxA) (Myxoma resistance protein 1) (Myxovirus resistance protein 1) [Cleaved into: Interferon-induced GTP-binding protein Mx1, N-terminally processed] 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: Interferon-induced dynamin-like GTPase with antiviral activity against a wide range of RNA viruses and some DNA viruses. Its target viruses include negative-stranded RNA viruses and HBV through binding and inactivation of their ribonucleocapsid. May also antagonize reoviridae and asfarviridae replication. Inhibits thogoto virus (THOV) replication by preventing the nuclear import of viral nucleocapsids. Inhibits La Crosse virus (LACV) replication by sequestering viral nucleoprotein in perinuclear complexes, preventing genome amplification, budding, and egress. Inhibits influenza A virus (IAV) replication by decreasing or delaying NP synthesis and by blocking endocytic traffic of incoming virus particles. Enhances ER stress-mediated cell death after influenza virus infection. May regulate the calcium channel activity of TRPCs.

Subcellular Localization: Cytoplasm . Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side. Cytoplasm, perinuclear region . Note=Binds preferentially to negatively charged phospholipids (PubMed:21900240). Colocalizes with CCHFV protein N in the perinuclear region (PubMed:15047845).; [Isoform 2]: Cytoplasm . Nucleus . Note=Translocates into the nuclei of HSV-1 infected cells (PubMed:20603636).

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.