

Recombinant Rat MAVS Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52527

Size: 10ug, 100ug

Protein Name: Mitochondrial antiviral-signaling protein (MAVS) (Interferon beta promoter stimulator protein 1) (IPS-1) (Virus-induced-signaling adapter) (VISA)

Synonym: Mavs, Ips1, Visa

UniProt ID: Q66HG9

UniProt Link: www.uniprot.org/uniprotkb/Q66HG9/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 507 AA

Molecular Weight: 54 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTFAEEKTYKYIRYNHSEKFCVLDVLEILPYLSCLTTSDQDRLRASYKQLGNQGTLWELFNTLQRRPG
WVEVFIRALRICELPGLAEQVTRVYQSYLPPGASLHSLDPLQSPRIPTTVSEPSAFAAGHTIPDSGFQ
DKPGYPKPVQDTQPPKSPVENSEEPPQANFGAIPRMSGDSLSSPNPPALSPQPSREHPEQEPELG
GPSTANVDSVPIATYGPVSPTVSFQPLPRIAPRTNLSPGVTVSALS AKTTLSSSSTGSAFAKGAGDQA
KAATCVSTKEGVPTNSVTTSSVPSIKPVPVNTMSSKLPISTKSTAATPSTVPTNIAPSKLPINSVYTGIV
PSKVTASVAKASASTMPPERNNKQAKETLEAPATVTTGSSLTRPDISSRSLHSGPELSKPGVLVSQ
VDNEPFSACSMDLAISPSTSLGSEPNHGPEENEYSSFRIQVDKSPSVDLLGSPEPLATQQSPEEEEP
CASSVSWAKWLGATSALLAFLAVMLYRSRHLAQ

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 Mitochondrial antiviral-signaling protein (MAVS) (Interferon beta promoter stimulator protein 1) (IPS-1) (Virus-induced-signaling adapter) (VISA) 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: Adapter required for innate immune defense against viruses. Acts downstream of DHX33, RIGI and IFIH1/MDA5, which detect intracellular dsRNA produced during viral replication, to coordinate pathways leading to the activation of NF-kappa-B, IRF3 and IRF7, and to the subsequent induction of antiviral cytokines such as IFN-beta and RANTES (CCL5). Peroxisomal and mitochondrial MAVS act sequentially to create an antiviral cellular state. Upon viral infection, peroxisomal MAVS induces the rapid interferon-independent expression of defense factors that provide short-term protection, whereas mitochondrial MAVS activates an interferon-dependent signaling pathway with delayed kinetics, which amplifies and stabilizes the antiviral response. May activate the same pathways following detection of extracellular dsRNA by TLR3. May protect cells from apoptosis. Involved in NLRP3 inflammasome activation by mediating NLRP3 recruitment to mitochondria.

Subcellular Localization: Mitochondrion outer membrane ; Single-pass membrane protein . Mitochondrion . Peroxisome .

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.