

Recombinant Human MAVS Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50662

Size: 10ug, 100ug

Protein Name: Mitochondrial antiviral-signaling protein (MAVS) (CARD adapter inducing interferon beta) (Cardif) (Interferon beta promoter stimulator protein 1) (IPS-1) (Putative NF-kappa-B-activating protein 031N) (Virus-induced-signaling adapter) (VISA)

Synonym: MAVS, IPS1, KIAA1271, VISA

UniProt ID: Q7Z434

UniProt Link: www.uniprot.org/uniprotkb/Q7Z434/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 540 AA

Molecular Weight: 57 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPFAEDKTYKYICRNFNFCNVDVVEILPYLPCLTARDQDRLRATCTLSGNRDTLWHLFNTLQRRPG
WVEYFIAALRGCELVDLADEVASVYQSYQPRTSDRPPDLEPPSLPAERPGPPTPAAAH SIPYN SCR
EKEPSYPMPVQETQAPESPGENSEQALQTLSPRAIPRNP DGGPLESSSDLAALSPLTSSGHQE QDT
ELGSTHTAGATSSLTSPSRGPVSPSVSFQPLARSTPRASRLPGPTGSVVSTGTSFSSSSPGLASAGA
AEGKQGAESDQAEPIICSSGAEAPANSLPSKVPTTLM PVNTVALKVPANPASVSTVPSKLPTSSKPP
GAVPSNALTNPAPSKLPINSTRAGMVPSKVPTSMVLTKVSASTVPTDGSSRNEETPAAPTPAGATG
GSSAWLDSSSENRLGLGSELSKPGVLASQVDSPFSGCFEDLAISASTSLGMGPCHGPEENEYKSEG T
FGIHVAENPSIQLLEGNPGPPADPDGGPRPQADRKFQEREVPCHRPSPGALWLQVAVTGVLVVTLL
VVLYRRRLH

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) (CARD adapter inducing interferon beta) (Cardif) (Interferon beta promoter stimulator protein 1) (IPS-1) (Putative NF-kappa-B-activating protein 031N) (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 (PubMed:16125763, PubMed:16127453, PubMed:16153868, PubMed:16177806, PubMed:19631370, PubMed:20127681, PubMed:20451243, PubMed:21170385, PubMed:23087404, PubMed:27992402, PubMed:33139700, PubMed:37582970, PubMed:39589880, PubMed:38995016). 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 IFNB and RANTES (CCL5) (PubMed:16125763, PubMed:16127453, PubMed:16153868, PubMed:16177806, PubMed:19631370, PubMed:20127681, PubMed:20451243, PubMed:20628368, PubMed:21170385, PubMed:23087404, PubMed:25636800, PubMed:27736772, PubMed:33110251, PubMed:40042308). Peroxisomal and mitochondrial MAVS act sequentially to create an antiviral cellular state (PubMed:20451243). 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 (PubMed:20451243). May activate the same pathways following detection of extracellular dsRNA by TLR3 (PubMed:16153868). May protect cells from apoptosis (PubMed:16125763). Involved in NLRP3 inflammasome activation by mediating NLRP3 recruitment to mitochondria (PubMed:23582325).

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.