Recombinant MAVS protein (His tag)

Catalog Number	540602
Synonyms	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
Species	Human
Expression System	E. coli
Accession	Q7Z434
Molecular Weight	Predictes a molecular mass of 12.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	2-98
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2-98 aa (Q7Z434) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human MAVS (2-98) Fragment - A high-purity protein fragment encompassing the complete CARD domain (residues 10-77) of Mitochondrial Antiviral-Signaling Protein. This fragment serves as an essential tool for investigating the molecular mechanisms of innate immune signaling and antiviral defense pathways. Mitochondrial Antiviral-Signaling Protein (MAVS), also known as Cardif, IPS-1, or VISA, functions as a critical adapter protein in innate immune defense against viral infections. Located primarily on the mitochondrial outer membrane and peroxisomes, MAVS coordinates downstream signaling pathways following viral detection by RIG-I-like receptors. It activates NF-kappa-B, IRF3, and IRF7 transcription factors, leading to the induction of antiviral cytokines including interferon-beta. MAVS operates through a dual mechanism where peroxisomal MAVS provides rapid interferon-independent protection, while mitochondrial MAVS establishes sustained interferon-dependent antiviral responses. The protein also contributes to NLRP3 inflammasome activation by facilitating NLRP3 recruitment to mitochondria. The CARD domain contained within this recombinant fragment mediates crucial protein-protein interactions in these signaling cascades.