Recombinant MADD protein (His tag)

Catalog Number	547840
Synonyms	Differentially expressed in normal and neoplastic cells; Insulinoma glucagonoma clone 20; Rab3 GDP/GTP exchange factor; RabGEF; Rab3 GDP/GTP exchange protein; Rab3GEP
Species	Human
Expression System	E. coli
Accession	Q8WXG6
Molecular Weight	Predictes a molecular mass of 44.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	1280-1647
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1280-1647 aa (Q8WXG6) 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 MADD Death Domain Fragment (residues 1280-1647) is a high-purity protein fragment designed for studying the specific functions of the death domain in MAP kinase activation, Rab GTPase regulation, and TNFα-mediated signaling pathways. This 368-amino acid fragment provides researchers with a targeted tool for investigating domain-specific interactions and mechanisms. The full-length MAP kinase-activating death domain protein (MADD) is a multifunctional guanyl-nucleotide exchange factor that regulates small GTPases of the Rab family, including RAB27A, RAB27B, RAB3A, RAB3C, and RAB3D. It converts these GTPases from their GDP-bound inactive forms to GTP-bound active states, playing crucial roles in synaptic vesicle exocytosis, vesicle trafficking at neuromuscular junctions, and vesicle transport to presynaptic nerve terminals. MADD also functions in TNFA-mediated activation of the MAPK pathway, including ERK1/2, and may link TNFRSF1A with MAP kinase activation while potentially regulating TNFα-induced apoptosis. The protein localizes to the cell membrane, cytoplasm, and axonal cell projections, indicating its involvement in diverse cellular compartments and processes.