Recombinant CAV3 protein (His tag)

Catalog Number	540072
Synonyms	M-caveolin
Species	Human
Expression System	E. coli
Accession	P56539
Molecular Weight	Predictes a molecular mass of 18.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-151
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-151 aa (P56539) 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 Caveolin-3 (M-caveolin) Fragment (residues 1-151) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable, soluble domain of Caveolin-3, optimized for research applications exploring its scaffolding functions and interactions with signaling proteins. Caveolin-3, encoded by the CAV3 gene, is a scaffolding protein localized to caveolae membranes in the sarcolemma of skeletal muscle and cardiomyocytes. It directly interacts with G-protein alpha subunits to regulate their activity and modulates voltage-gated potassium channels. Caveolin-3 plays a critical role in membrane repair mechanisms, enabling rapid resealing of mechanically disrupted membranes, and mediates the recruitment of CAVIN2 and CAVIN3 proteins to caveolae. The protein is primarily found in the Golgi apparatus membrane, cell membrane (particularly caveolae and sarcolemma), and functions as a peripheral membrane protein with a potential hairpin-like membrane structure.