Recombinant CCM2 protein (His tag)

Catalog Number	545814
Synonyms	Malcavernin
Species	Human
Expression System	E. coli
Accession	Q9BSQ5
Molecular Weight	Predictes a molecular mass of 15.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	39-160
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 39-160 aa (Q9BSQ5) 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 Cerebral Cavernous Malformations 2 Protein (Malcavernin) Fragment (residues 39-160) is a 122-amino acid construct designed for structural and biochemical studies. This fragment represents a stable, soluble domain of CCM2, a key regulator of cardiovascular integrity and endothelial cell junctions, optimized for research applications. The full-length Cerebral Cavernous Malformations 2 protein (CCM2), encoded by the CCM2 gene, is a critical component of the CCM signaling pathway that regulates heart and vessel formation and integrity. It functions as a scaffold protein, stabilizing endothelial cell junctions and modulating MAP2K3-MAP3K3 signaling, including MAP3K3-dependent p38 activation under hyperosmotic stress. CCM2 is localized in the cytoplasm, where it supports cellular signaling and structural functions essential for vascular development and homeostasis.