Recombinant CNN3 protein (His tag)

Catalog Number	540341
Synonyms	Calponin, acidic isoform
Species	Human
Expression System	E. coli
Accession	Q15417
Molecular Weight	Predictes a molecular mass of 19.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	1-163
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-163 aa (Q15417) 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 Calponin-3 Fragment (1-163) is a high-purity protein preparation encompassing the complete Calponin-homology (CH) domain. This fragment serves as an essential research tool for investigating the specific functions of the CH domain in smooth muscle contraction regulation and actin binding mechanisms. Calponin-3, also known as acidic isoform calponin, is a thin filament-associated protein that plays a crucial role in the regulation and modulation of smooth muscle contraction. The full-length protein functions by binding to actin, calmodulin, and tropomyosin, with its interaction with actin resulting in inhibition of actomyosin Mg-ATPase activity. This regulatory mechanism positions calponin-3 as a key modulator of smooth muscle contractile properties, making it an important target for cardiovascular and muscular system research.