Recombinant C2D4D protein (His tag)

Catalog Number	551930
Species	Human
Expression System	E. coli
Accession	B7Z1M9
Molecular Weight	Predictes a molecular mass of 17.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	206-353
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 206-353 aa (B7Z1M9) 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	This high-purity recombinant protein corresponds to amino acids 206-353 of the human C2 calcium-dependent domain-containing protein 4D (C2CD4D). The 148-amino acid fragment is engineered to fully encompass the functional C2 domain (residues 217-343), providing an ideal, isolated tool for investigating the specific biochemical and biophysical properties of this critical calcium-sensing module. C2CD4D is a human protein containing a C2 domain, a widespread structural motif known to mediate calcium-dependent phospholipid binding and membrane targeting in numerous signaling and trafficking proteins. While the specific cellular function and subcellular localization of the full-length C2CD4D protein are areas of active research, proteins containing C2 domains are fundamentally important in processes such as synaptic vesicle fusion, membrane repair, and lipid second messenger signaling. This recombinant fragment enables focused study of the isolated C2 domain's role within the context of C2CD4D biology.