Recombinant CABP4 protein (His tag)

Catalog Number	547108
Synonyms	CaBP4
Species	Human
Expression System	E. coli
Accession	P57796
Molecular Weight	Predictes a molecular mass of 18.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	128-275
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 128-275 aa (P57796) 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 Calcium-binding protein 4 (CaBP4) Fragment (aa 128-275) is a high-purity protein designed for studying the EF-hand domains critical for calcium sensing and synaptic regulation. This fragment provides an ideal tool for investigating calcium-dependent signaling mechanisms in photoreceptor and auditory systems. Calcium-binding protein 4 (CaBP4), encoded by the CABP4 gene, plays a vital role in normal synaptic function by regulating calcium influx and neurotransmitter release in photoreceptor synaptic terminals and auditory transmission. It functions as a modulator of voltage-gated calcium channels CACNA1D and CACNA1F, suppressing calcium-dependent inactivation while shifting activation ranges toward hyperpolarized voltages. The protein localizes to the cytoplasm and presynapses, specifically in rod spherules and cone pedicles of photoreceptor presynapses, highlighting its importance in visual and auditory signal processing pathways.