Recombinant TM2D1 protein (His tag)

Catalog Number	545847
Synonyms	Amyloid-beta-binding protein; hBBP
Species	Human
Expression System	E. coli
Accession	Q9BX74
Molecular Weight	Predictes a molecular mass of 10.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	46-128
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 46-128 aa (Q9BX74) 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 TM2D1 Protein Fragment (residues 46-128) is a high-purity, soluble protein derived from the TM2 domain-containing protein 1, also known as Amyloid-beta-binding protein (hBBP). This 83-amino acid fragment is engineered for stability and solubility, making it ideal for structural studies, biochemical assays, and investigating its role in amyloid-beta-induced apoptosis pathways. The full-length TM2D1 protein, encoded by the TM2D1 gene in Homo sapiens, is a multi-pass membrane protein localized to cellular membranes. It functions in amyloid-beta-induced apoptosis through its interaction with beta-APP42, implicating it in neurodegenerative processes. This recombinant fragment represents a stable, soluble unit computationally selected to facilitate research into the protein's mechanistic roles without the complexities of the full-length membrane-associated form.