Recombinant TECTB protein (His tag)

Catalog Number	549619
Species	Human
Expression System	E. coli
Accession	Q96PL2
Molecular Weight	Predictes a molecular mass of 15.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	157-281
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 157-281 aa (Q96PL2) 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 Beta-tectorin (TECTB) Fragment (aa 157-281) is a high-purity, soluble protein derived from the human Beta-tectorin, optimized for structural and biochemical research. This 125-amino acid fragment represents a stable, non-collagenous region of the protein, ideal for studying its role in auditory function and extracellular matrix interactions. Beta-tectorin, encoded by the TECTB gene in humans, is a major non-collagenous component of the tectorial membrane in the inner ear. This extracellular matrix structure covers the cochlear neuroepithelium and interacts with stereocilia bundles of sensory hair cells, facilitating sound transduction into electrical signals by deflecting hair cell stereocilia during sound-induced movement. The protein is localized to the cell membrane via a GPI-anchor on the extracellular side and is secreted into the extracellular matrix, specifically within the tectorial membrane, highlighting its critical role in auditory processing and mechanical sensing.