Recombinant TECTA protein (His tag)

Catalog Number	537299
Species	Human
Expression System	E. coli
Accession	O75443
Molecular Weight	Predictes a molecular mass of 18.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1930-2081
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 1930-2081 aa (O75443) 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 Alpha-tectorin (TECTA) Fragment (1930-2081) is a 152-amino acid human protein fragment designed for structural and biochemical studies. This soluble, stable unit enables researchers to investigate the molecular mechanisms of hearing and extracellular matrix function in the inner ear. Alpha-tectorin, encoded by the TECTA gene, is one of the major non-collagenous components of the tectorial membrane in the inner ear. This extracellular matrix structure covers the cochlear neuroepithelium and directly contacts the stereocilia bundles of sensory hair cells. During sound perception, movement of hair cells relative to the tectorial membrane deflects stereocilia, generating electrical signals that transduce sound. The protein is localized to the extracellular side of the cell membrane via GPI-anchor attachment and is secreted into the extracellular matrix. The selected fragment (1930-2081) represents a computationally predicted stable and soluble region suitable for experimental applications.