Recombinant TEKT3 protein (His tag)

Catalog Number	541176
Species	Human
Expression System	E. coli
Accession	Q9BXF9
Molecular Weight	Predictes a molecular mass of 47.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	95-490
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 95-490 aa (Q9BXF9) 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 Tektin-3 (TEKT3) Fragment (aa 95-490) is a high-quality protein product designed for structural and functional studies. This 396-amino acid fragment represents a stable and soluble unit of Tektin-3, optimized for biochemical and biophysical applications. Ideal for researchers investigating ciliary and flagellar biology, this recombinant protein supports studies of microtubule organization and sperm motility mechanisms. Tektin-3 is a microtubule inner protein (MIP) that forms filamentous polymers within the walls of ciliary and flagellar microtubules in the axoneme. It is an essential component of dynein-decorated doublet microtubules (DMTs) and plays a critical role in maintaining normal sperm mobility. The protein localizes to the cytoplasm, specifically to the cytoskeleton of cilia and flagella axonemes, and associates with peripheral membranes in secretory vesicles and the acrosome outer membrane. In spermatozoa, Tektin-3 predominantly localizes to flagella but is also found in the head region, where it associates with structures such as the mitochondrial sheath, outer dense fibers, and acrosome membrane. Its dynamic translocation during sperm activation underscores its importance in reproductive biology and cellular motility.