Recombinant IFT25 protein (His tag)

Catalog Number	541626
Synonyms	Heat shock protein beta-11; Hspb11; Heat shock protein family B member 11; Placental protein 25; PP25
Species	Human
Expression System	E. coli
Accession	Q9Y547
Molecular Weight	Predictes a molecular mass of 17.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-144
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 1-144 aa (Q9Y547) 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 Intraflagellar Transport Protein 25 Homolog (IFT25/Hspb11) Fragment (1-144 aa) is a high-purity, stable protein fragment derived from human IFT25. This product is designed for studies of ciliary transport mechanisms and Sonic hedgehog (SHH) signaling pathways, offering a soluble and structurally defined unit ideal for biochemical assays, structural analysis, and functional investigations. The full-length Intraflagellar Transport Protein 25 Homolog (IFT25), also known as Heat Shock Protein Beta-11 (Hspb11), is a component of the IFT complex B essential for Sonic hedgehog (SHH) signaling. It facilitates the dynamic transport of SHH signaling molecules within cilia, including the export of SMO and PTCH1 receptors and the accumulation of GLI2 at the ciliary tip. IFT25 is localized to the cilium and plays critical roles in male fertility, spermiogenesis, sperm flagella formation, and early kidney development, particularly in regulating ureteric bud initiation. While not required for ciliary assembly, its function is prominent in cilia-rich tissues such as kidney and testis, underscoring its importance in specialized cellular processes.