Recombinant BBS5 protein (His tag)

Catalog Number	547731
Synonyms	Bardet-Biedl syndrome 5 protein
Species	Human
Expression System	E. coli
Accession	Q8N3I7
Molecular Weight	Predictes a molecular mass of 32.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	1-268
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-268 aa (Q8N3I7) 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 BBS5 Protein Fragment (1-268 aa) is a high-quality, soluble protein designed for structural and functional studies. This fragment of the Bardet-Biedl syndrome 5 protein (BBS5) represents a stable region ideal for investigating the BBSome complex's role in ciliary membrane trafficking and ciliogenesis. The full-length BBS5 protein is a key component of the BBSome complex, which functions as a coat complex essential for sorting specific membrane proteins to primary cilia. It plays a critical role in ciliogenesis by mediating Rab8-GTP localization to the cilium, facilitating vesicle docking and fusion at the ciliary membrane. Additionally, the BBSome complex, including BBS5, regulates SMO ciliary trafficking and contributes to sonic hedgehog (SHH) pathway signaling. BBS5 is required for the BBSome complex's ciliary localization but not for its assembly. Subcellularly, it localizes to the cilium membrane, cytoplasm, basal body, centrosome, and centriolar satellites, underscoring its importance in cellular structures involved in ciliary function.