Recombinant NPHP3 protein (His tag)

Catalog Number	547596
Species	Human
Expression System	E. coli
Accession	Q7Z494
Molecular Weight	Predictes a molecular mass of 25.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	1087-1292
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 1087-1292 aa (Q7Z494) 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 Nephrocystin-3 (NPHP3) Fragment (aa 1087-1292) is a high-quality, soluble protein product derived from human NPHP3, designed for structural and biochemical studies. This 206-amino acid fragment represents a stable, well-expressed region of Nephrocystin-3, a key regulator of ciliary function and Wnt signaling pathways, making it an ideal tool for investigating ciliary biology and molecular signaling mechanisms. Nephrocystin-3, encoded by the NPHP3 gene in humans, is essential for normal ciliary development and function. It acts as a molecular switch between Wnt signaling pathways, inhibiting disheveled-1-induced canonical Wnt signaling and potentially influencing non-canonical Wnt signaling involved in planar cell polarity. This protein is critical for proper convergent extension cell movements during development. Nephrocystin-3 localizes to cilia through interactions with UNC119 and UNC119B, which bind to its N-terminal myristoyl moiety, highlighting its role in ciliary structure and signaling. The provided fragment (aa 1087-1292) was selected for its stability and solubility, enabling focused research on Nephrocystin-3's functional domains.