Recombinant PRPH2 protein (His tag)

Catalog Number	537630
Synonyms	Retinal degeneration slow protein; Tetraspanin-22; Tspan-22
Species	Human
Expression System	E. coli
Accession	P23942
Molecular Weight	Predictes a molecular mass of 18.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	124-264
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 124-264 aa (P23942) 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	This recombinant protein product features a stable and soluble fragment (residues 124-264) of human Peripherin-2, also known as Retinal Degeneration Slow protein or Tetraspanin-22. It is designed for structural and biochemical studies, offering researchers a reliable tool to investigate the molecular mechanisms underlying photoreceptor function and retinal health. Peripherin-2, encoded by the PRPH2 gene, is essential for the morphogenesis and structural maintenance of photoreceptor outer segment disks in the retina. It plays a critical role in the development and organization of photoreceptor inner segments and is necessary for preserving the thickness of the outer nuclear layer. This multi-pass membrane protein is localized to the photoreceptor outer and inner segments, where it collaborates with proteins like ROM1 to uphold disk integrity. Dysfunctions in Peripherin-2 are associated with retinal degeneration, highlighting its importance in visual system research.