Recombinant IMPG1 protein (His tag)

Catalog Number	542768
Synonyms	Interphotoreceptor matrix proteoglycan of 150 kDa; IPM-150; Sialoprotein associated with cones and rods
Species	Human
Expression System	E. coli
Accession	Q17R60
Molecular Weight	Predictes a molecular mass of 18.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	564-716
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 564-716 aa (Q17R60) 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 Interphotoreceptor Matrix Proteoglycan 1 (IMPG1) Fragment (aa 564-716) is a high-purity protein designed for investigating the SEA 2 domain's role in extracellular matrix scaffolding and glycosaminoglycan interactions within the interphotoreceptor matrix. Interphotoreceptor Matrix Proteoglycan 1 (IPM-150) is a chondroitin sulfate-, heparin-, and hyaluronan-binding protein that forms a fundamental macromolecular scaffold in the insoluble interphotoreceptor matrix, essential for photoreceptor structure and function. It localizes to the extracellular space, specifically the interphotoreceptor matrix, photoreceptor outer segments, and inner segments, playing a critical role in maintaining retinal integrity. The provided fragment spans residues 564-716 and fully encompasses the SEA 2 domain, enabling targeted studies on domain-specific binding and structural properties.