Recombinant TPGS2 protein (His tag)

Catalog Number	549238
Synonyms	PGs2
Species	Human
Expression System	E. coli
Accession	Q68CL5
Molecular Weight	Predictes a molecular mass of 27.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-227
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 1-227 aa (Q68CL5) 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 Tubulin Polyglutamylase Complex Subunit 2 (PGs2) Fragment (residues 1-227) is a high-quality protein product designed for structural and biochemical studies. This fragment, derived from the TPGS2 gene, represents a stable and soluble unit ideal for investigating the role of PGs2 in cilia and flagella polyglutamylation, essential for cellular motility and biogenesis. Tubulin polyglutamylase complex subunit 2 (PGs2) is a key component of the tubulin polyglutamylase complex (TPGC), which catalyzes polyglutamylation—a critical post-translational modification of tubulin in cilia and flagella. This modification is vital for the proper formation and function of these cellular structures, influencing processes such as cell motility and signaling. PGs2 localizes to the cytoplasm, cytoskeleton, microtubule organizing center, centrosome, and centriolar satellites, where it associates with microtubules to regulate their dynamics and function. The provided fragment (residues 1-227) was computationally selected to ensure stability and solubility, facilitating experimental applications without compromising functional relevance.