Recombinant PEX19 protein (His tag)

Catalog Number	546958
Synonyms	33 kDa housekeeping protein; Peroxin-19; Peroxisomal farnesylated protein
Species	Human
Expression System	E. coli
Accession	P40855
Molecular Weight	Predictes a molecular mass of 15.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	174-296
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 174-296 aa (P40855) 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 PEX19 Fragment (aa 174-296) - A high-quality, stable protein fragment derived from Peroxisomal biogenesis factor 19, essential for peroxisome formation and membrane protein targeting. This 123-amino acid fragment has been computationally optimized for superior solubility and stability, making it ideal for structural studies and functional assays. Peroxisomal biogenesis factor 19 (PEX19) is a crucial protein in peroxisome formation, functioning as both a cytosolic chaperone and import receptor for peroxisomal membrane proteins (PMPs). It binds and stabilizes newly synthesized PMPs in the cytoplasm through interaction with their hydrophobic membrane domains and facilitates their targeting to the peroxisome membrane via binding to PEX3. Additionally, PEX19 plays a role in cellular regulation by excluding CDKN2A from the nucleus and preventing its interaction with MDM2, leading to active degradation of TP53. The protein is primarily localized in the cytoplasm, with a fraction membrane-associated to the outer surface of peroxisomes through lipid-anchoring on the cytoplasmic side. This strategic localization enables its dual role in cytoplasmic PMP stabilization and peroxisomal membrane targeting.