Recombinant PEX14 protein (His tag)

Catalog Number	546536
Synonyms	PTS1 receptor-docking protein; Peroxin-14; Peroxisomal membrane anchor protein PEX14
Species	Human
Expression System	E. coli
Accession	O75381
Molecular Weight	Predictes a molecular mass of 14.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	127-241
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 127-241 aa (O75381) 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 PEX14 (Peroxisomal membrane protein PEX14) fragment (residues 127-241) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment represents a stable, computationally optimized region of the PTS1 receptor-docking protein, facilitating research into peroxisomal protein import mechanisms and organelle dynamics. Peroxisomal membrane protein PEX14 is a critical component of the PEX13-PEX14 docking complex, which functions as a translocon channel for importing peroxisomal cargo proteins bound to the PEX5 receptor. This complex forms a large import pore, enabling the insertion of the receptor into the peroxisomal membrane and the translocation of cargo into the peroxisome matrix. Additionally, PEX14 plays a key role in peroxisome movement through direct interaction with tubulin. The full-length protein is localized to the peroxisome membrane as a single-pass membrane protein, underscoring its importance in peroxisome biogenesis and function.