Recombinant PEX7 protein (His tag)

Catalog Number	541710
Synonyms	PTS2 receptor; Peroxin-7
Species	Human
Expression System	E. coli
Accession	O00628
Molecular Weight	Predictes a molecular mass of 37.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	1-323
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-323 aa (O00628) 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 Peroxisomal targeting signal 2 receptor (PEX7) fragment (amino acids 1-323) - a high-quality protein reagent designed for studying peroxisomal protein import mechanisms. This stable, soluble fragment retains key functional domains and is ideal for structural studies, biochemical assays, and investigating PTS2-mediated peroxisomal targeting pathways. Peroxisomal targeting signal 2 receptor (PEX7) serves as a critical receptor for the peroxisomal import of proteins containing a C-terminal PTS2-type peroxisomal targeting signal. The protein functions by specifically binding to cargo proteins containing PTS2 signals in the cytosol, then forming a ternary complex with PEX5 that facilitates translocation into peroxisomes through the PEX13-PEX14 docking complex. PEX7 exhibits dual subcellular localization, primarily residing in the cytoplasm/cytosol where it binds cargo proteins, and subsequently translocating into the peroxisome matrix along with PTS2-containing cargo proteins and PEX5. This receptor plays an essential role in maintaining peroxisomal function by ensuring proper targeting and import of PTS2-containing proteins, making it a valuable target for research into peroxisomal disorders and protein trafficking mechanisms.