Recombinant OSB11 protein (His tag)

Catalog Number	548146
Synonyms	ORP-11; OSBP-related protein 11
Species	Human
Expression System	E. coli
Accession	Q9BXB4
Molecular Weight	Predictes a molecular mass of 47.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	342-747
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 342-747 aa (Q9BXB4) 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	This recombinant protein product features a stable and soluble fragment (amino acids 342-747) of human Oxysterol-binding protein-related protein 11 (ORP-11), designed for structural and biochemical studies. ORP-11 plays critical roles in lipid metabolism, adipocyte differentiation, and intracellular lipid transport, making this fragment an essential tool for investigating its molecular mechanisms. ORP-11, encoded by the OSBPL11 gene, is a human protein involved in regulating adipocyte differentiation through modulation of ADIPOQ and FABP4 levels and participates in triglyceride storage control. It weakly binds 25-hydroxycholesterol and functions as a lipid transfer protein through heterodimerization with OSBPL9. This complex localizes at ER-trans-Golgi membrane contact sites, where it exchanges phosphatidylserine for phosphatidylinositol-4-phosphate—a crucial step for sphingomyelin synthesis in the Golgi apparatus. ORP-11 is primarily located in late endosome membranes and the trans-Golgi network, specifically at the Golgi-late endosome interface, highlighting its importance in intracellular lipid trafficking and organelle communication.