Recombinant OSBL8 protein (His tag)

Catalog Number	545874
Synonyms	ORP-8; OSBP-related protein 8
Species	Human
Expression System	E. coli
Accession	Q9BZF1
Molecular Weight	Predictes a molecular mass of 47.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	374-772
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 374-772 aa (Q9BZF1) 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 Oxysterol-binding protein-related protein 8 (ORP-8) Fragment (aa 374-772) is a high-quality, stable protein designed for structural and biochemical studies. This 399-amino acid fragment, derived from the OSBPL8 gene, represents a soluble and functional unit ideal for investigating lipid transport mechanisms and protein-ligand interactions. ORP-8, encoded by the OSBPL8 gene in Homo sapiens, is a lipid transporter that facilitates countertransport between the endoplasmic reticulum and plasma membrane. It specifically exchanges phosphatidylserine for phosphatidylinositol 4-phosphate (PI4P), enabling phosphatidylserine delivery to the plasma membrane while PI4P is degraded in the endoplasmic reticulum. The protein binds phosphatidylserine and PI4P in a mutually exclusive manner and also interacts with oxysterols, 25-hydroxycholesterol, and cholesterol. Full-length ORP-8 localizes to the endoplasmic reticulum membrane as a single-pass membrane protein and has been observed in nuclear membranes, with specific isoforms enriched at endoplasmic reticulum-plasma membrane contact sites, highlighting its critical role in maintaining lipid homeostasis and cellular membrane dynamics.