Recombinant OSBP2 protein (His tag)

Catalog Number	538657
Synonyms	Oxysterol-binding protein-related protein 4; ORP-4; OSBP-related protein 4
Species	Human
Expression System	E. coli
Accession	Q969R2
Molecular Weight	Predictes a molecular mass of 48.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	507-916
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 507-916 aa (Q969R2) 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 Oxysterol-binding protein 2 (OSBP2) fragment (residues 507-916) is a high-quality protein designed for structural and biochemical studies. This 410-amino acid fragment, derived from human OSBP2 (also known as ORP-4), is computationally optimized for stability and solubility, making it ideal for investigating oxysterol-binding mechanisms and cellular lipid transport processes. Oxysterol-binding protein 2 (OSBP2/ORP-4) is a human protein that specifically binds 7-ketocholesterol, playing crucial roles in lipid metabolism and cellular signaling. The protein is membrane-associated and localizes to cytoplasmic vesicles, secretory vesicles, and the acrosome in sperm cells. During spermatid development, OSBP2 functions prior to cytoplasmic removal from sperm heads, indicating its importance in cellular remodeling and maturation processes. The full-length protein's involvement in sterol binding and membrane-associated functions makes it significant for studying lipid homeostasis, reproductive biology, and related pathological conditions.