Recombinant OBP2A protein (His tag)

Catalog Number	543761
Synonyms	Odorant-binding protein IIa; OBPIIa
Species	Human
Expression System	E. coli
Accession	Q9NY56
Molecular Weight	Predictes a molecular mass of 19.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	16-170
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 16-170 aa (Q9NY56) 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 Odorant-binding protein 2a (OBPIIa) fragment (residues 16-170) is a stable and soluble protein unit designed for structural and biochemical studies. This fragment retains key functional regions, enabling research into its role in binding and transporting hydrophobic volatile molecules, particularly aldehydes and fatty acids. Odorant-binding protein 2a (OBPIIa), encoded by the OBP2A gene in humans, functions as a carrier for small hydrophobic volatile compounds. It exhibits high affinity for aldehydes (such as undecanal, benzenic, heterocyclic, and aliphatic aldehydes) and large fatty acids like palmitic acid, facilitating their transport. The protein is naturally secreted, indicating its extracellular role in molecular recognition and signaling processes. This recombinant fragment encompasses residues 16-170, representing a computationally optimized domain for experimental applications while preserving functional relevance.