Recombinant LPD6B protein (His tag)

Catalog Number	549303
Species	Human
Expression System	E. coli
Accession	Q8NI32
Molecular Weight	Predictes a molecular mass of 15.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	40-164
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 40-164 aa (Q8NI32) 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 Ly6/PLAUR domain-containing protein 6B (LYPD6B) fragment (amino acids 40-164) is a high-purity protein designed for studying nicotinic acetylcholine receptor (nAChR) modulation. This fragment fully encompasses the functional UPAR/Ly6 domain, making it an ideal tool for investigating subtype-specific receptor interactions and regulatory mechanisms in neurological research. Ly6/PLAUR domain-containing protein 6B, encoded by the LYPD6B gene, functions as a modulator of nicotinic acetylcholine receptors (nAChRs) in a subtype- and stoichiometry-dependent manner. Research demonstrates it enhances acetylcholine sensitivity in α3(3):β4(2) nAChRs while decreasing maximal current response and accelerating desensitization. It shows specificity toward certain nAChR configurations, including modulation of α3(2):α5:β4(2) nAChRs containing the CHRNA5/α-5 Asn-398 variant, while exhibiting minimal or no effect on α7 homomeric nAChRs according to most studies. The protein is localized to the cell membrane via a GPI-anchor, positioning it for direct interaction with membrane-bound receptors. This recombinant fragment provides a targeted approach for investigating the UPAR/Ly6 domain's role in nAChR regulation and neuronal signaling pathways.