Recombinant GDPD5 protein (His tag)

Catalog Number	545547
Synonyms	Glycerophosphocholine phosphodiesterase GDPD5; Glycerophosphodiester phosphodiesterase 2; Phosphoinositide phospholipase C GDPD5
Species	Human
Expression System	E. coli
Accession	Q8WTR4
Molecular Weight	Predictes a molecular mass of 33.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	214-496
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 214-496 aa (Q8WTR4) 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 GDPD5 Protein Fragment (214-496) is a high-purity, functional protein fragment encompassing the glycerophosphodiester phosphodiesterase (GP-PDE) domain. This product is engineered to support research on neurite formation, motor neuron differentiation, and glycosylphosphatidylinositol (GPI) anchor cleavage mechanisms. The full-length Glycerophosphodiester phosphodiesterase domain-containing protein 5 (GDPD5) is a multi-pass membrane protein localized to the endomembrane system, perinuclear cytoplasm, and growth cones. It functions as a glycerophosphodiester phosphodiesterase that promotes neurite formation and drives spinal motor neuron differentiation. GDPD5 mediates cleavage of the GPI anchor from proteins like RECK, facilitating their release from the plasma membrane, and may contribute to osmotic regulation of cellular glycerophosphocholine. This recombinant fragment provides a targeted tool for investigating these specific enzymatic and cellular processes.