Recombinant PLCB2 protein (His tag)

Catalog Number	540151
Synonyms	Phosphoinositide phospholipase C-beta-2; Phospholipase C-beta-2; PLC-beta-2
Species	Human
Expression System	E. coli
Accession	Q00722
Molecular Weight	Predictes a molecular mass of 36.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	522-829
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 522-829 aa (Q00722) 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 PLC-beta-2 Fragment (522-829): A high-purity protein fragment encompassing the PI-PLC Y-box and C2 domains from human 1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase beta-2. This product is engineered for studying domain-specific functions in phosphoinositide signaling pathways. The full-length PLC-beta-2 enzyme (UniProt: Q00722) mediates the production of key second messengers diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) through hydrolysis of phosphatidylinositol 4,5-bisphosphate. In neutrophils, it contributes to GPCR signaling pathways by promoting RASGRP4 activation via DAG, thereby regulating neutrophil functional responses. This fragment provides targeted access to the structural domains critical for these signaling functions.