# Recombinant PLD1 protein (His tag)

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| **Catalog Number** | 544920 |
| **Synonyms** | PLD 1; hPLD1; Choline phosphatase 1; Phosphatidylcholine-hydrolyzing phospholipase D1 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q13393 |
| **Molecular Weight** | Predictes a molecular mass of 53.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band. |

## Product Information

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| **Sequence Region** | 55-497 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >87%, 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 55-497 aa (Q13393) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human Phospholipase D1 (PLD1) Fragment (aa 55-497) is a high-purity protein designed for studying the specific functions of its key domains, including PX, PH, and PLD phosphodiesterase 1. This fragment serves as an essential tool for researchers investigating phosphatidylcholine hydrolysis, cellular signaling, and membrane trafficking pathways.<br>Phospholipase D1 (PLD1) is a human enzyme that selectively hydrolyzes phosphatidylcholine, playing a critical role in numerous cellular processes such as signal transduction, membrane trafficking, and mitotic regulation. It is primarily localized in the perinuclear region and is membrane-associated in the endoplasmic reticulum, Golgi apparatus, and late endosomes, where it functions on the cytoplasmic side through lipid anchors. This strategic localization underscores its importance in intracellular vesicular transport and signaling networks. |