

Recombinant human PDPK1 protein ab60834

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Description

Product name	Recombinant human PDPK1 protein
Biological activity	Specific Activity: 123 nmol/min/mg.
Purity	> 80 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Specifications

Our **Abpromise guarantee** covers the use of **ab60834** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE Western blot
Form	Liquid
Additional notes	ab204873 (AKT1 + PKN2 peptide substrate) can be utilized as a substrate for assessing kinase activity

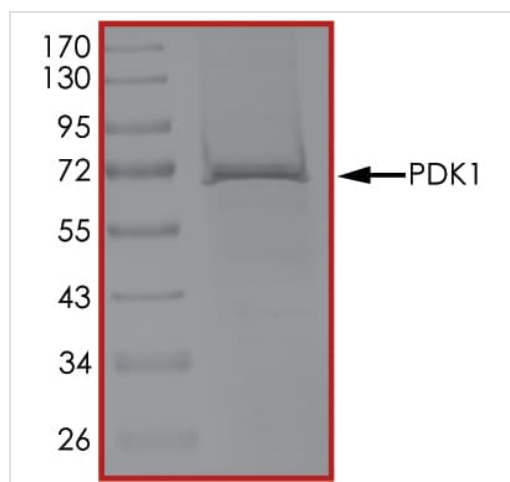
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.00 Preservative: 1.02% Imidazole Constituents: 0.00174% PMSF, 0.82% Sodium phosphate, 0.00308% DTT, 25% Glycerol (glycerin, glycerine), 1.74% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

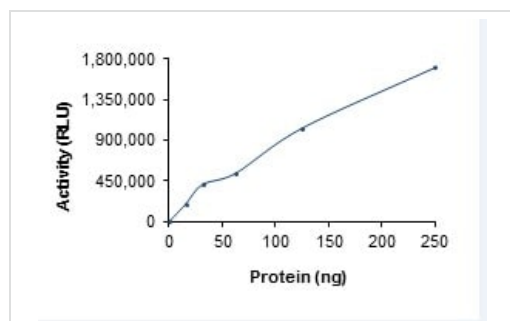
Function	Phosphorylates and activates not only PKB/AKT, but also PKA, PKC-zeta, RPS6KA1 and RPS6KB1. May play a general role in signaling processes and in development (By similarity). Isoform 3 is catalytically inactive.
Tissue specificity	Appears to be expressed ubiquitously.
Sequence similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PDK1 subfamily. Contains 1 PH domain. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylated on tyrosine and serine/threonine. Phosphorylation on Ser-241 in the activation loop is required for full activity. PDK1 itself can autophosphorylate Ser-241, leading to its own activation.
Cellular localization	Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation. Tyrosine phosphorylation seems to occur only at the plasma membrane.

Images



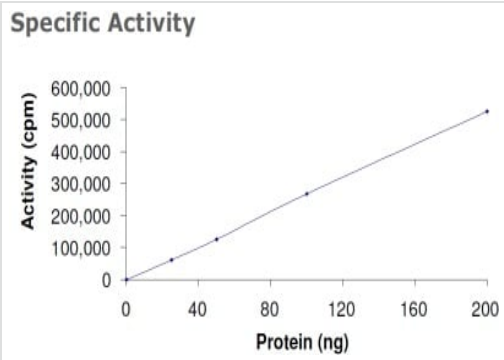
SDS PAGE analysis of ab60834.

SDS-PAGE - Recombinant human PDPK1 protein (ab60834)



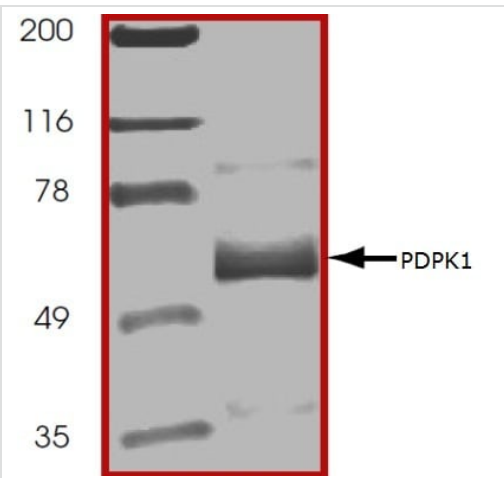
The specific activity of PDPK1 (ab60834) was determined to be 25 nmol /min/mg as per activity assay protocol.

Functional Studies - Recombinant human PDPK1 protein (ab60834)



Sample Kinase Activity Plot.

Functional Studies - Recombinant human PDPK1 protein (ab60834)



ab60834 on SDS-PAGE, MW ~67kDa.

SDS-PAGE - Recombinant human PDPK1 protein (ab60834)



Western blot - Recombinant human PDPK1 protein (ab60834)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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