

Recombinant Human Polycystic Kidney Disease 2 (Autosomal Dominant)

Cat. No. PKD2-660H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species

Human

Source

E.coli

Description

PKD2 is a novel phorbol ester- and growth factor-stimulated serine/threonine kinase that contains two cysteine-rich motifs at the N terminus, a pleckstrin homology domain, and a catalytic domain. It exhibits the strongest homology to the serine/threonine protein kinases PKD/PKC μ and PKC ν . The PKD family of enzymes have been implicated in very diverse cellular functions, including Golgi organization and plasma membrane directed transport, metastasis, immune responses, apoptosis and cell proliferation.

Application

Kinase activity is measured as the molar amount of phosphate incorporated into the CREBTIDE substrate peptide (KRREILSRPSYR), per minute per mg protein at 30 °C using a final concentration of 50 μ M [32P] ATP.

Biochem/physiol Actions

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Physical Form	Solution of 50 µl in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM dithiothreitol (DTT), 0.1 mM EGTA, and 30% glycerol.
Assay	≥70% (SDS-PAGE).
Form	aqueous glycerol solution.
Mol Wt	protein apparent mol wt ~140 kDa.
Storage Temp	-70°C.

GENE INFORMATION

Gene Name	PKD2 polycystic kidney disease 2 (autosomal dominant) [Homo sapiens]
Synonyms	PKD2; polycystic kidney disease 2 (autosomal dominant); PC2; PKD4; Pc-2; APKD2; TRPP2; MGC138466; MGC138468; polycystwin; polycystwin; transient receptor potential cation channel, subfamily P, member 2
Gene ID	5311
mRNA Refseq	NM_000297
Protein Refseq	NP_000288
MIM	173910
UniProt ID	Q13563
Chromosome Location	4q21-q23

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Function

ATP binding; calcium ion binding; channel activity; cytoskeletal protein binding; ion channel activity; potassium channel activity; protein C-terminus binding; voltage-gated chloride channel activity; voltage-gated sodium channel activity

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