

Active Recombinant Human PAK4

Cat. No. PAK4-18H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	PAK4KD is a recombinant wild type human PAK4 kinase domain (amino acids 300–591 of full-length human PAK4) expressed in E. coli and purified to homogeneity with full activity.
Species	Human
Source	E.coli
Description	Human PAK4 kinase (UniProt: O96013; NCBI: NM_005884) belongs to a family of p21-activated kinases. These serine/threonine kinases are regulated by the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton.
Form	1 mg/ml in Storage Buffer of 25 mM Tris-HCl pH 8.0, 150 mM NaCl, 10% glycerol, 5 mM DTT.
Bio-activity	5,595 pmoles/min/μg
Molecular Mass	The calculated mass is 33,309. PAK4KD is fully phosphorylated at S474 with a measured mass of 33,389 (1P).
AA Sequence	GPHMSHEQFRAALQLVVDPGDPRSYLDNFIKIGEGSTGIVCIATVRSSGKLVAVKKM DLRKQQRRELLFNEVVIM RDYQHENVVEMYNSYLVGDELWVVMFLEGGALTDIVT HTRMNEEQIAAVCLAVLQALSVLHAQGVVHRDIKSD SILLTHDGRVKLSDFGFCAQV

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SKEVPRRKS LVGTPYWM APELISRLPYGPEVDIWSL GIMVIEMVDGEPPYFNE PPLK
 AMKMIRDNLPPRLK NLHKVSPSLKGFLDRLLVRDPAQRATAAELLKHPFLAKAGPPA
 SIVPLMRQNRT

Applications Enzymatic studies, inhibitor screen, and selectivity profiling

Storage Stable at -70oC for 12 months from date of receipt. Protein should be thawed on ice.
 Protein can be flash-frozen in liquid nitrogen and stored at -70oC.

GENE INFORMATION

Gene Name [PAK4 p21 protein \(Cdc42/Rac\)-activated kinase 4 \[Homo sapiens \]](#)

Official Symbol PAK4

Synonyms PAK4; p21 protein (Cdc42/Rac)-activated kinase 4; p21(CDKN1A) activated kinase 4; serine/threonine-protein kinase PAK 4; PAK-4; p21-activated kinase 4; p21(CDKN1A)-activated kinase 4; protein kinase related to *S. cerevisiae* STE20, effector for Cdc42Hs;

Gene ID [10298](#)

mRNA Refseq [NM_001014831](#)

Protein Refseq [NP_001014831](#)

MIM [605451](#)

UniProt ID [O96013](#)

Chromosome 19p11-q11

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Location**Pathway**

Activation of Rac, organism-specific biosystem; Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem; Axon guidance, organism-specific biosystem; CDC42 signaling events, organism-specific biosystem; Developmental Biology, organism-specific biosystem; ErbB signaling pathway, organism-specific biosystem;

Function

ATP binding; nucleotide binding; protein kinase activity; protein serine/threonine kinase activity;

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