

Recombinant Human PAK4 Protein (Val299-Ser542), His tagged

Cat. No. PAK4-3888H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PAK4 (Val299-Ser542) fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Val299-Ser542
Description	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, growth, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates and inactivates the protein phosphatase SSH1, leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor cofilin. Decreased cofilin activity may lead to stabilization of actin filaments. Phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle

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	progression by controlling levels of the cell-cycle regulatory protein CDKN1A and by phosphorylating RAN.
Form	Lyophilized powder/frozen liquid
Molecular Mass	27.92 kDa
Purity	>90% as determined by SDS-PAGE.
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS, pH 7.5 or lyophilized from PBS, pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	They are shipped out with dry ice/blue ice unless customers require otherwise.
GENE INFORMATION	
Gene Name	PAK4 p21 protein (Cdc42/Rac) -activated kinase 4 [Homo sapiens (human)]
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;

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Gene ID	10298
mRNA Refseq	NM_001014831
Protein Refseq	NP_001014831
MIM	605451
UniProt ID	O96013

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