

## CDKN1A

## Recombinant Human p21 Activated Kinase 4 His

**Catalog No.** CRC170A **Quantity**: 5 μg

CRC170B 25 μg CRC170C 1 mg

Alternate Names: PAK-4, p21 (CDKN1A)-Activated Kinase 4, p21-Activated Kinase 4, Serine/threonine-

protein kinase PAK 4, KIAA1142, PAK4.

**Description:** PAK4 is part of the group B family of p21-activated kinases (PAK). It's known as an

effector protein for cell division cycle 42 (Cdc42) and protein that plays an important role in regulating cytoskeletal organization and cell morphology. PAK4 expression is eminent in many cancer cell lines, and is involved in tumorigenesis. PAK proteins are significant effectors that associate Rho GTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins are targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 cooperates specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of

MAP kinases. PAK4 is a mediator of filopodia formation and is involved in the reorganization of the actin cytoskeleton. PAK4 activates the JNK pathway. PAK4 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.

PAK4 Human Recombinant produced in E. coli is a single, non-glycosylated polypeptide

chain containing 628 amino acids (1-591 a.a.).

Source: E. coli

Molecular Mass: 68.3 kDa

Formulation: PAK4 is fused to 37 amino acid His-Tag at N-terminus and is purified by standard

chromatography techniques.

**Purity:** Greater than 90% as determined by SDS-PAGE.

Physical Appearance: Sterile filtered colorless solution.

Amino Acid Sequence: MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMFG KRKKRVEISA

PSNFEHRVHT GFDQHEQKFT GLPRQWQSLI EESARRPKPL VDPACITSIQ PGAPKTIVRG SKGAKDGALT LLLDEFENMS VTRSNSLRRD SPPPPARARQ ENGMPEEPAT TARGGPGKAG SRGRFAGHSE AGGGSGDRRR AGPEKRPKSS REGSGGPQES SRDKRPLSGP DVGTPQPAGL ASGAKLAAGR PFNTYPRADT DHPSRGAQGE PHDVAPNGPS AGGLAIPQSS SSSSRPPTRA RGAPSPGVLG PHASEPQLAP PACTPAAPAV PGPPGPRSPQ REPQRVSHEQ FRAALQLVVD PGDPRSYLDN FIKIGEGSTG IVCIATVRSS GKLVAVKKMD LRKQQRRELL FNEVVIMRDY QHENVVEMYN SYLVGDELWV VMEFLEGGAL TDIVTHTRMN EEQIAAVCLA VLQALSVLHA QGVIHRDIKS DSILLTHDGR VKLSDFGFCA QVSKEVPRRK SLVGTPYWMA PELISRLPYG PEVDIWSLGI MVIEMVDGEP PYFNEPPLKA MKMIRDNLPP RLKNLHKVSP SLKGFLDRLL VRDPAQRATA

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AELLKHPFLA KAGPPASIVP LMRQNRTR.

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Storage & Stability:

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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