Recombinant PAK4 protein



Catalog No: 31189

Expressed In: Baculovirus

Quantity: 10 μg

Source: Human

Buffer Contents: 10 μ g of Recombinant PAK4 protein in 50 mM Tris-HCl, pH 8.0; 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20% glycerol. Protein is supplied at 0.122 μ g/ μ l.

Background: PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts 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 may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

Protein Details: Recombinant human PAK4 protein was produced using baculovirus infected Sf9 cells. The protein was made against amino acids M1-R591, accession number NM_005884 and N-terminally fused to GST-HIS₆-Thrombin cleavage site. Purified by GSH-agarose affinity purification.

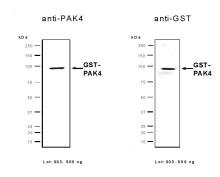
Application Notes: Recombinant PAK4 is suitable for kinase assays and Western blot. The molecular weight of the protein is \sim 93.968 kDa. The activity of the protein is \sim 8 pmol/µg min.

Recommended kinase reaction conditions: 60 mM HEPES-NaOH, pH 7.5, 3 mM MgCl $_2$, 3 mM MnCl $_2$, 3 µM Na-orthovanadate, 1.2 mM DTT, ATP (variable), 2.5 µg/50 µl PEG20.000, Substrate: tetra (LRRWSLG), 2.5 µg / 50 µl, Recombinant PAK4: 100 ng/50 µl.

Kinase activity may vary depending on the substrate and reaction conditions used.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant PAK4 protein tested by SDS-PAGE gel.

0.5 µg of PAK4 protein was analyzed using SDS/PAGE followed by Western blot with either an anti-PAK4 or anti-GST antibody.