

PAK4 active protein

Recombinant PAK4 protein

CATALOG #
AAA60329

HOST
Baculovirus

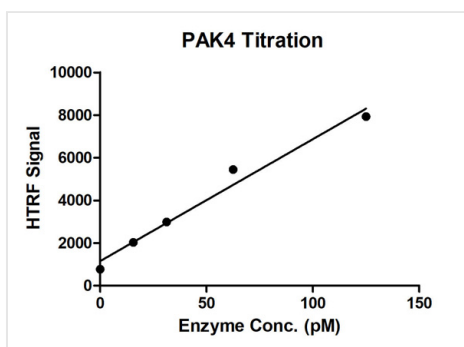
PRODUCT SYNONYMS

PAK4; Recombinant PAK4 protein; P21 (RAC1) Activated Kinase 4; PAK4 active protein

PRODUCT SPECIFICATIONS

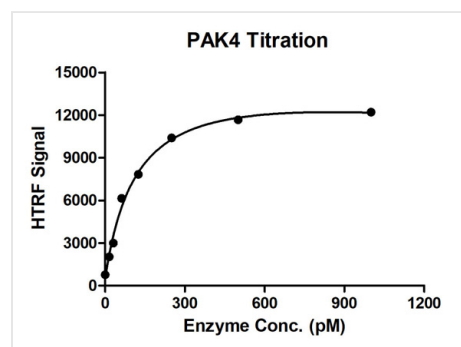
Host	Baculovirus
Purity/Purification	>=90%
Form/Format	Recombinant PAK4 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Protein Details	Recombinant PAK4 protein was expressed in baculovirus expression system as the full length protein (accession number NP_001014831.1) with a N-terminal DYKDDDDK tag. The molecular weight of the protein is 65.3 kDa.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

IMAGES



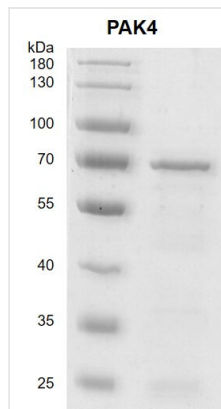
Bioactivity

HTRF Assay for Recombinant PAK4 activity. 1 μ M STK S2 substrate was incubated with different concentrations of PAK4 protein in 10 μ l reaction system containing 1 $\times$ Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT and 100 μ M ATP for 1 hour. The 10 μ l detection reagents containing anti-STK antibody (1:2) and SA-XL665 (1:100) diluted with 1 $\times$ Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



Bioactivity

HTRF Assay for Recombinant PAK4 activity. 1 μ M STK S2 substrate was incubated with different concentrations of PAK4 protein in 10 μ l reaction system containing 1 $\times$ Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT and 100 μ M ATP for 1 hour. The 10 μ l detection reagents containing anti-STK antibody (1:2) and SA-XL665 (1:100) diluted with 1 $\times$ Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



SDS-PAGE

Recombinant PAK4 protein gel 10% SDS-PAGE gel with Coomassie blue staining MW: 65.3 kDa Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for PAK4 active protein

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 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. 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 phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. PAK4 phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. PAK4 phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers.

Product Categories/Family for PAK4 active protein

Kinase; Recombinant Proteins

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/baculovirus-active-protein/pak4/60329>