

Bioactive

Full-Length

PAK1 (Human) Recombinant Protein

Catalog # P5788 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification	
Product Description	Human PAK1 (NP_002567.3, 1 a.a 545 a.a.) full-length recombinant protein with GST tag express ed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	88
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	84 % by SDS-PAGE/CBB staining



Product Information

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluoresce nce-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates we re separated and detected by LabChip3000. Substrate: LIMKtide. ATP: 100 μ M.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — PAK1	
Entrez GenelD	<u>5058</u>
Protein Accession#	NP_002567.3
Gene Name	PAK1
Gene Alias	MGC130000, MGC130001, PAKalpha
Gene Description	p21 protein (Cdc42/Rac)-activated kinase 1
Omim ID	602590
Gene Ontology	<u>Hyperlink</u>
Gene Summary	PAK proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nucle ar signaling. PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PA K2, PAK3 and PAK4. These proteins serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK1 regulates cell m otility and morphology. Alternativelt spliced transcript variants encoding different isoforms have be en found for this gene. [provided by RefSeq
Other Designations	STE20 homolog, yeast p21-activated kinase 1 p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast) p21/Cdc42/Rac1-activated kinase 1 (yeast Ste20-related)



Pathway

- Axon guidance
- Chemokine signaling pathway
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- MAPK signaling pathway
- Natural killer cell mediated cytotoxicity
- Regulation of actin cytoskeleton
- Renal cell carcinoma
- T cell receptor signaling pathway

Disease

- Carcinoma
- Esophageal Neoplasms
- HIV Infections
- Tobacco Use Disorder