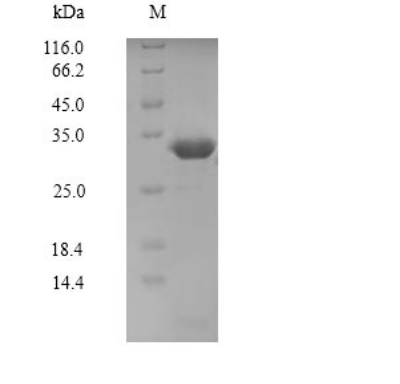
Recombinant Human Serine/threonine-protein kinase PAK 5 (PAK5), partial

Product Code	CSB-BP885798HU
Relevance	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, 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 the proto-oncogene RAF1 and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions.
Abbreviation	Recombinant Human PAK5 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8TB93
Alias	p21-activated kinase 5 Short name: PAK-5 p21-activated kinase 7 Short name: PAK-7
Product Type	Recombinant Protein
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MFGKKKKKIEISGPSNFEHRVHTGFDAQEQKFTGLPQQWHSLLADTANRPKP MVDPSCITPIQLAPMKTIVRGNKPCKETSINGLLEDFDNISVTRSNSLRKESPPT PDQGASSHGPGHAEENGFITFSQYSSESDTTADYTTEKYREKSLYGDDLDPY YRGSHAAKQNGHVMKMKHGEAYYSEVKPLKSDFARFSADYHSHLDSLSKPS EYSDLKWEYQRASSSSPLDYSFQFTPSRTAGTSGCSKESLAYSESEWGPSLD DYDRRPKSSYLNQTSPQPTMRQRSRSGSGLQ
Research Area	Cancer
Source	Baculovirus
Target Names	PAK5
Expression Region	1-293aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	34.9kDa

Protein Length	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human PAK5 covers amino acids 1-293. This PAK5 protein is theoretically predicted to have a molecular weight of 34.9 kDa. This PAK5 protein is produced using baculovirus expression system. The N-terminal 6xHis tag was fused into the coding gene segment of PAK5, making it easier to detect and purify the PAK5 recombinant protein in the later stages of expression and purification.

Serine/threonine-protein kinase PAK 5 (PAK5) is a widely studied protein with significant roles in cell signaling and cancer biology. PAK5 is primarily investigated in the fields of cell polarity, cell movement, and proliferation regulation. In these processes, PAK5 influences cell morphology and movement by orchestrating the reorganization of the cell's cytoskeleton and phosphorylation of substrate proteins. Additionally, PAK5 is closely linked to the occurrence and progression of various cancers, gradually becoming a key focus in cancer biology research.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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