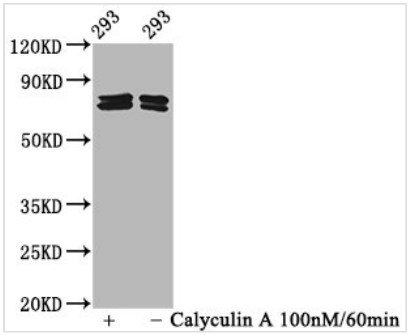
Phospho-PAK4/PAK5/PAK6 (S474/S560/S602) Recombinant Monoclonal Antibody

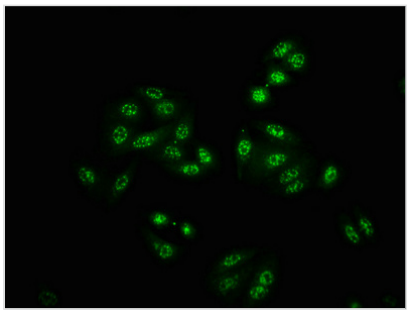
Product Code	CSB-RA017408A474phHU
Abbreviation	Serine/threonine-protein kinase PAK 4
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O96013/Q9P286/Q9NQU5
Immunogen	A synthesized peptide derived from Human Phospho-PAK4/PAK5/PAK6 (S474/S560/S602)
Species Reactivity	Human
Tested Applications	ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200
Relevance	Serine/threonine protein kinase that 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. 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. Phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle progression by controlling levels of the cell-cycle regulatory protein CDKN1A and by phosphorylating RAN.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Serine/threonine-protein kinase PAK 4, p21-activated kinase 4, PAK-4, PAK4, KIAA1142
Immunogen Species	Homo sapiens (Human)
Research Area	Cell Biology

Gene Names	PAK4/PAK5/PAK6
Clone No.	2D1

Image



Western Blot
Positive WB detected in 293 whole cell lysate(treated with Calyculin A or not)
All lanes Phospho-PAK4/PAK5/PAK6 antibody at 2.15µg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 64,75,80 KDa
Observed band size: 75,80 KDa



Immunofluorescence staining of HepG2 cells(treated with 50mM Calyculin A for 30min) with CSB-RA017408A474phHU at 1:100,counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

To make the phospho-PAK4/PAK5/PAK6 (S474/S560/S602) recombinant monoclonal antibody, the first step is to isolate the genes coding for the phospho-PAK4/PAK5/PAK6 (S474/S560/S602) antibody from the rabbits immunized with a synthesized peptide derived from human phospho-PAK4/PAK5/PAK6 (S474/S560/S602) protein. Secondly, these antibody genes are cloned into expression vectors. Thirdly, the modified vectors are transfected into host suspension cells. Fourthly, positive cells are cultured to express and secrete antibodies. The phospho-PAK4/PAK5/PAK6 (S474/S560/S602) recombinant monoclonal antibody is purified from the cell culture supernatant through affinity chromatography. Finally, the activity of the antibody is tested in ELISA, WB, and IF tests. This antibody can react with human phospho-PAK4/PAK5/PAK6 (S474/S560/S602) protein.