

PAK α (phospho Thr212) rabbit pAb**Cat#: orb769331 (Manual)**

For research use only. Not intended for diagnostic use.

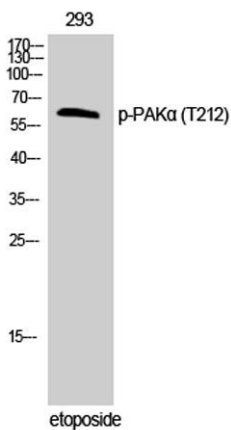
Product Name	PAK α (phospho Thr212) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human PAK1 around the phosphorylation site of Thr212. AA range:178-227
Specificity	Phospho-PAK α (T212) Polyclonal Antibody detects endogenous levels of PAK α protein only when phosphorylated at T212.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Serine/threonine-protein kinase PAK 1
Gene Name	PAK1
Cellular localization	Cytoplasm . Cell junction, focal adhesion . Cell projection, lamellipodium . Cell membrane . Cell projection, ruffle membrane . Cell projection, invadopodium . Nucleus, nucleoplasm . Chromosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Colocalizes with RUFY3, F-actin and other core migration components in invadopodia at the cell periphery (PubMed:25766321). Recruited to the cell membrane by interaction with CDC42 and RAC1. Recruited to focal adhesions upon activation. Colocalized with CIB1 within membrane ruffles during cell spreading upon readhesion to fibronectin. Upon DNA damage, translocates to the nucleoplasm when phosphorylated at Thr-212 where is co-recruited with MORC2 on damaged chromatin (PubMed:23260667). Localization to

the centrosome does not depen

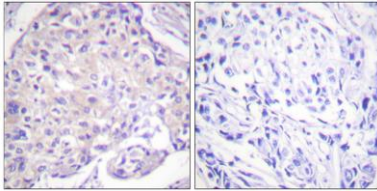
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	65kD
Human Gene ID	5058
Human Swiss-Prot Number	Q13153
Alternative Names	PAK1; Serine/threonine-protein kinase PAK 1; Alpha-PAK; p21-activated kinase 1; PAK-1; p65-PAK

Background

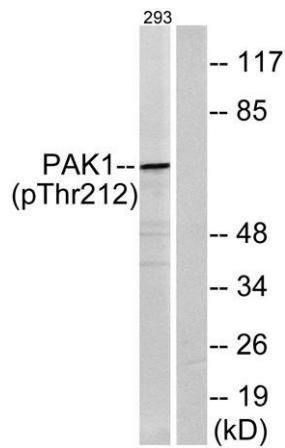
This gene encodes a family member of serine/threonine p21-activating kinases, known as PAK proteins. These proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nuclear signaling, and they serve as targets for the small GTP binding proteins Cdc42 and Rac. This specific family member regulates cell motility and morphology. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2010],



Western Blot analysis of 293 cells using Phospho-PAK α (T212) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PAK1 (Phospho-Thr212) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with etoposide 25uM 1h, using PAK1 (Phospho-Thr212) Antibody. The lane on the right is blocked with the phospho peptide.