

**PAK $\alpha$  (phospho Ser199) rabbit pAb****Cat#: orb769332 (Manual)**

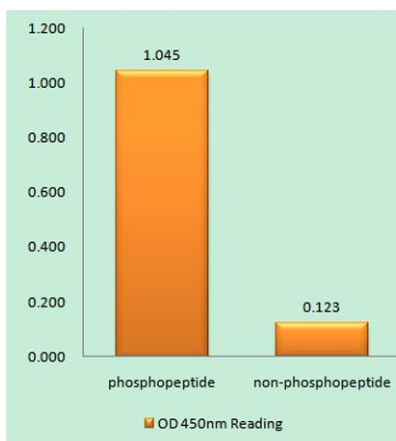
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	PAK $\alpha$ (phospho Ser199) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PAK1 around the phosphorylation site of Ser199. AA range:165-214
<b>Specificity</b>	Phospho-PAK $\alpha$ (S199) Polyclonal Antibody detects endogenous levels of PAK $\alpha$ protein only when phosphorylated at S199.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Serine/threonine-protein kinase PAK 1
<b>Gene Name</b>	PAK1
<b>Cellular localization</b>	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

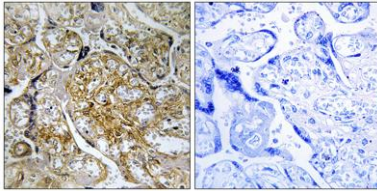
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<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	61kD
<b>Human Gene ID</b>	5058
<b>Human Swiss-Prot Number</b>	Q13153
<b>Alternative Names</b>	PAK1; Serine/threonine-protein kinase PAK 1; Alpha-PAK; p21-activated kinase 1; PAK-1; p65-PAK

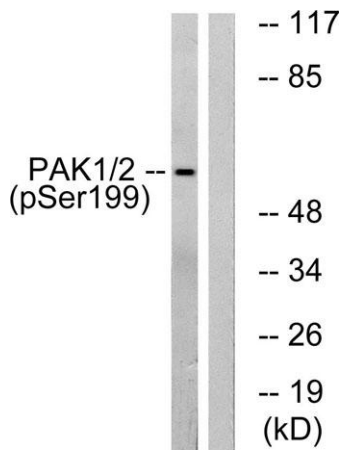
**Background** This gene encodes a family member of serine/threonine p21-activating kinases, known as PAK proteins. These proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nuclear signaling, and they serve as targets for the small GTP binding proteins Cdc42 and Rac. 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],



**Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PAK1 (Phospho-Ser199) Antibody**



Immunohistochemistry analysis of paraffin-embedded human placenta, using PAK1 (Phospho-Ser199) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from LOVO cells treated with starved 24h, using PAK1 (Phospho-Ser199) Antibody. The lane on the right is blocked with the phospho peptide.