

# Anti-PAK6 (Ser-165), phospho-specific

Cat. # **PP1551**  
Host **Rabbit Polyclonal**  
Size **100µl**

## **Background:**

p21-activated kinase 6 (PAK6) is a member of the PAK family of serine/threonine kinases. These kinases have a highly conserved amino-terminal Cdc42/Rac interactive binding domain and a carboxyl-terminal kinase domain. PAK kinases are implicated in the regulation of a number of cellular processes, including cytoskeleton rearrangement, apoptosis and the MAP kinase signaling pathway. PAK6 interacts with the androgen receptor, a steroid hormone transcription factor involved in male sexual differentiation and development. PAK6 is highly expressed in testis and prostate tissues. Regulation of PAK6 kinase activity occurs through multiple sites of phosphorylation. Activation of PAK6 requires autophosphorylation of Ser-560 and MKK-6 induced phosphorylation of Tyr-566. In addition, p38 MAPK can phosphorylate Ser-165, which increases PAK6 kinase activity. Thus, multiple signaling pathways may regulate the activity of PAK6 through differential phosphorylation.

## **References:**

Kaur, R. et al. (2005) J. Biol. Chem. 280(5) :3323.  
Schrantz, N. et al. (2004) J. Biol. Chem. 279(3):1922.  
Lee, S.R. et al. (2002) Mol. Endocrin. 16(1):85.

## **Immunogen:**

PAK6 (Ser-165) synthetic peptide (coupled to carrier protein) corresponding to amino acids around serine 165 in human PAK6. The sequence used has two amino acid differences compared to rat and mouse PAK6.

## **Buffer and Storage:**

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

## **Applications:**

Western blotting 1:1000 dilution<sup>†</sup>  
ELISA 1:2000 dilution

End user should determine optimal dilution for their particular applications and experiments.

<sup>†</sup>Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

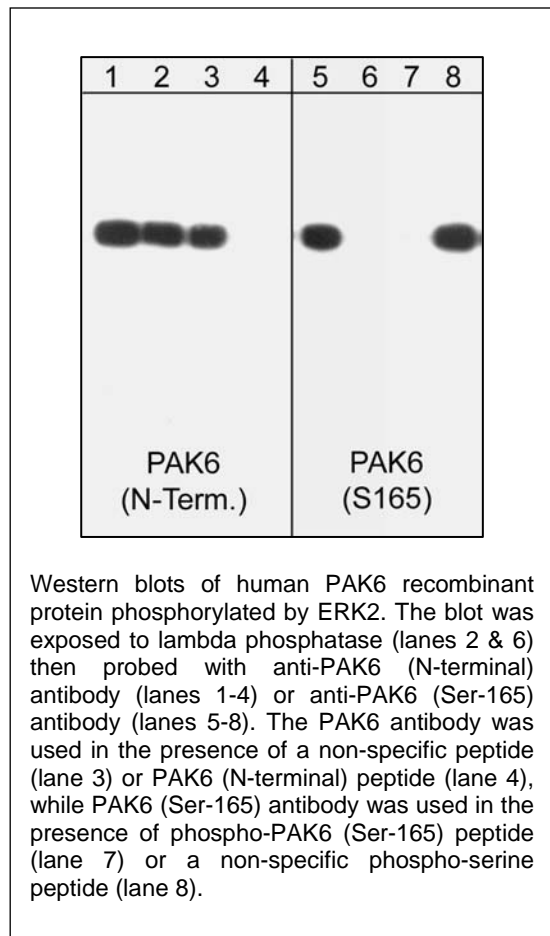
## **Specificity:**

This antibody was cross-adsorbed to unphosphorylated PAK6 (Ser-165) peptide then affinity purified using phospho-PAK6 (Ser-165) peptide. The antibody detects a 75 kDa\* band on SDS-PAGE immunoblots of human PAK6 recombinant protein phosphorylated with ERK2. This reactivity is specifically blocked by pre-incubation with phospho-PAK6 (Ser-165) peptide and also by treatment with lambda phosphatase.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

## **Related Products:**

PP1511 PAK6 (N-terminal region) Rabbit Polyclonal      PX1515 PAK6 (N-terminal) Peptide  
PX1555 phospho-PAK6 (Ser-165) Peptide



Western blots of human PAK6 recombinant protein phosphorylated by ERK2. The blot was exposed to lambda phosphatase (lanes 2 & 6) then probed with anti-PAK6 (N-terminal) antibody (lanes 1-4) or anti-PAK6 (Ser-165) antibody (lanes 5-8). The PAK6 antibody was used in the presence of a non-specific peptide (lane 3) or PAK6 (N-terminal) peptide (lane 4), while PAK6 (Ser-165) antibody was used in the presence of phospho-PAK6 (Ser-165) peptide (lane 7) or a non-specific phospho-serine peptide (lane 8).

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