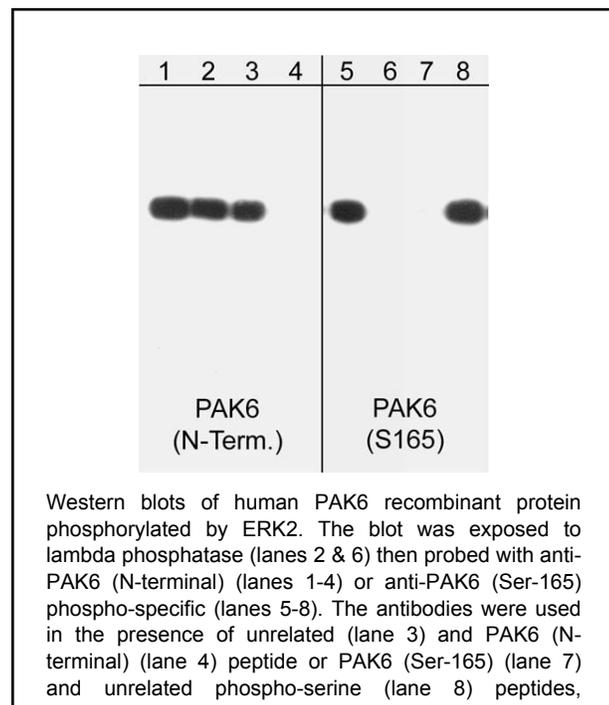


Background

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.

Background References

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



Applications

WB 1:1000
 ELISA 1:2000

Species Reactivity

Hu

Specificity

This antibody was affinity purified using PAK6 (N-terminal) peptide. The antibody detects a 75 kDa* band on SDS-PAGE immunoblots of human PAK6 recombinant protein. This reactivity is specifically blocked by pre-incubation with PAK6 (N-terminal) peptide and is not affected by lambda phosphatase treatment.

End user should determine optimal dilution for their particular applications and experiments.
 Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

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

Immunogen

Uniprot ID: Q9NQ5

A synthetic peptide (coupled to carrier protein) corresponding to amino acids in the N-terminal region of 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. Stable for 1 year.

Related Products

PP1551 PAK6 (Ser-165), phospho-specific Rabbit Polyclonal
 PX1515 PAK6 (N-terminal) Blocking Peptide
 PX1555 phospho-PAK6 (Ser-165) Blocking Peptide
 PK7740 Phospho-Serine, -Threonine, & -Tyrosine Immunocytochemistry Kit

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