

PAK6 (h4): 293 Lysate: sc-158808

BACKGROUND

The p21^{CDKN1A}-activated kinases (PAKs) are serine/threonine protein kinases that bind to activated small GTPases, including Cdc42 and Rac, and influence transcription, cell morphology (cytoskeleton rearrangement), motility and apoptosis. PAK family members contain an amino-terminal Cdc42/Rac interactive binding (CRIB) domain and a carboxyl-terminal kinase domain. PAK6 cotranslocates into the nucleus with androgen receptor, which is a steroid hormone-dependent transcription factor that is important for male sexual differentiation and development, in response to androgen. PAK6 transcripts are present at high levels in brain and testis, with lower levels in multiple tissues including prostate and breast. The human PAK6 gene maps to chromosome 15q15.1.

REFERENCES

1. Yang, F., Li, X., Sharma, M., Zarnegar, M., Lim, B. and Sun, Z. 2001. Androgen receptor specifically interacts with a novel p21-activated kinase, PAK6. *J. Biol. Chem.* 276: 15345-15353.
2. Lee, S.H., Eom, M., Lee, S.J., Kim, S., Park, H.J. and Park, D. 2001. β Pix-enhanced p38 activation by Cdc42/Rac/PAK/MKK3/6-mediated pathway. Implication in the regulation of membrane ruffling. *J. Biol. Chem.* 276: 25066-25072.
3. Jaffer, Z.M. and Chernoff, J. 2002. p21-activated kinases: three more join the PAK. *Int. J. Biochem. Cell. Biol.* 34: 713-717.
4. Schrantz, N., da Silva Correia, J., Fowler, B., Ge, Q., Sun, Z. and Bokoch, G.M. 2004. Mechanism of p21-activated kinase 6-mediated inhibition of androgen receptor signaling. *J. Biol. Chem.* 279: 1922-1931.
5. Kaur, R., Liu, X., Gjoerup, O., Zhang, A., Yuan, X., Balk, S.P., Schneider, M.C. and Lu, M.L. 2005. Activation of p21-activated kinase 6 by MAP kinase kinase 6 and p38 MAP kinase. *J. Biol. Chem.* 280: 3323-3330.
6. LocusLink Report (LocusID: 56924). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: PAK6 (human) mapping to 15q15.1.

PRODUCT

PAK6 (h4): 293 Lysate represents a lysate of human PAK6 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

PAK6 (h4): 293 Lysate is suitable as a Western Blotting positive control for human reactive PAK6 antibodies. Recommended use: 10-20 μ l per lane.

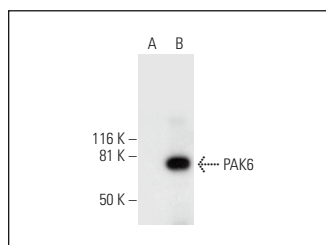
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PAK6 (H-6): sc-393075 is recommended as a positive control antibody for Western Blot analysis of enhanced human PAK6 expression in PAK6 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

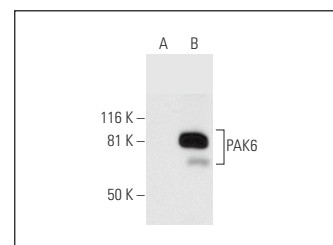
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PAK6 (H-6): sc-393075. Western blot analysis of PAK6 expression in non-transfected: sc-110760 (A) and human PAK6 transfected: sc-158808 (B) 293 whole cell lysates.



PAK6 (C-2): sc-393102. Western blot analysis of PAK6 expression in non-transfected: sc-110760 (A) and human PAK6 transfected: sc-158808 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.