SANTA CRUZ BIOTECHNOLOGY, INC.

PAK6 (H-300): sc-32857

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 protein 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.

CHROMOSOMAL LOCATION

Genetic locus: PAK6 (human) mapping to 15q15.1; Pak6 (mouse) mapping to 2 E5.

SOURCE

PAK6 (H-300) is a rabbit polyclonal antibody raised against amino acids 71-370 mapping within an internal region of PAK6 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

PAK6 (H-300) is recommended for detection of PAK6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PAK6 (H-300) is also recommended for detection of PAK6 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PAK6 siRNA (h): sc-39063, PAK6 siRNA (m): sc-44879, PAK6 shRNA Plasmid (h): sc-39063-SH, PAK6 shRNA Plasmid (m): sc-44879-SH, PAK6 shRNA (h) Lentiviral Particles: sc-39063-V and PAK6 shRNA (m) Lentiviral Particles: sc-44879-V.

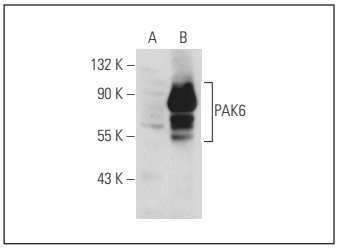
Molecular Weight of PAK6: 75 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or PAK6 (h4): 293 Lysate: sc-158808.

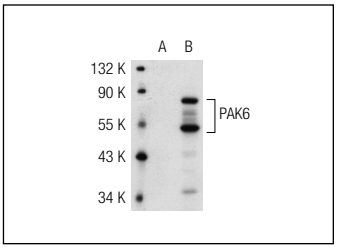
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

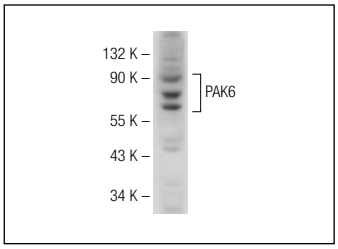
DATA



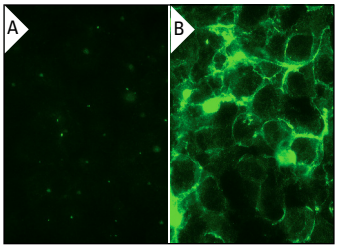
PAK6 (H-300): sc-32857. Western blot analysis of PAK6 expression in non-transfected: sc-117752 (**A**) and human PAK6 transfected: sc-158808 (**B**) 293T whole cell lysates.



PAK6 (H-300): sc-32857. Western blot analysis of PAK6 expression in non-transfected: sc-117752 (**A**) and human PAK6 transfected: sc-115034 (**B**) 293T whole cell lysates



PAK6 (H-300): sc-32857. Western blot analysis of PAK6 expression in SK-N-MC whole cell lysate.



PAK6 (H-300): sc-32857. Immunofluorescence staining of methanol-fixed untransfected (**A**) and human PAK6 transfected HEK 293T cells (**B**).

SELECT PRODUCT CITATIONS

1. McCarty, S.K., et al. 2010. Group I p21-activated kinases regulate thyroid cancer cell migration and are overexpressed and activated in thyroid cancer invasion. Endocr. Relat. Cancer 17: 989-999.
2. Manchanda, P.K., et al. 2013. Rac1 is required for Prkar1a-mediated Nf2 suppression in Schwann cell tumors. Oncogene 32: 3491-3499.