SANTA CRUZ BIOTECHNOLOGY, INC.

AWP1 (H-83): sc-366178

BACKGROUND

AWP1 (associated with PKN protein), also known as zinc finger A20 domain-containing protein 3 (ZA20D3) or AN1-type zinc finger protein 6 (ZFAND6 or ZFAND5B), is a ubiquitously expressed protein with highest expression levels in liver, kidney, placenta, heart and skeletal muscle. AWP1 contains two conserved domains (one AN1-type zinc finger and one A20-type zinc finger), two PEST sequences, seven casein kinase II phosphorylation sites, two N-myristoylation sites and four N-glycosylation sites. The AN1-type zinc finger and four cysteine residues near the N-terminus are conserved between AWP1, OSISAP1 and ZNF216. Human AWP1 shares 55% homology with ZNF216 and mouse AWP1. It is a potent inhibitor of NFκB and it interacts with PKN, possibly participating in the regulation of PKN signal transduction pathways. Two AWP1 isoforms exist, due to alternative splicing. Isoform 1 is the mature full length protein and isoform 2 lacks amino acids 52-63.

REFERENCES

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3. Mukhopadhyay, A., et al. 2004. Overexpression of a zinc-finger protein gene from rice confers tolerance to cold, dehydration, and salt stress in transgenic tobacco. Proc. Natl. Acad. Sci. USA 101: 6309-6314.
4. Cao, Y.K., et al. 2005. Construction of GFP-AWP1 fusion gene vector and its expression in 293 cells. Di Yi Jun Yi Da Xue Xue Bao 25: 174-176.
5. Lowes, D.A., et al. 2005. A microarray analysis of potential genes underlying the neurosensitivity of mice to propofol. Anesth. Analg. 101: 697-704.
6. Diatchenko, L., et al. 2005. Identification of novel mediators of NFκB through genome-wide survey of monocyte adherence-induced genes. J. Leukoc. Biol. 78: 1366-1377.
7. Dash, D.P., et al. 2006. Fine mapping of the keratoconus with cataract locus on chromosome 15q and candidate gene analysis. Mol. Vis. 12: 499-505.
8. Wullaert, A., et al. 2006. Ubiquitin: tool and target for intracellular NFκB inhibitors. Trends Immunol. 27: 533-540.
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CHROMOSOMAL LOCATION

Genetic locus: ZFAND6 (human) mapping to 15q25.1; Zfand6 (mouse) mapping to 7 D3.

SOURCE

AWP1 (H-83) is a rabbit polyclonal antibody raised against amino acids 1-83 mapping at the N-terminus of AWP1 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.

APPLICATIONS

AWP1 (H-83) is recommended for detection of AWP1 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).

AWP1 (H-83) is also recommended for detection of AWP1 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for AWP1 siRNA (h): sc-62004, AWP1 siRNA (m): sc-62005, AWP1 shRNA Plasmid (h): sc-62004-SH, AWP1 shRNA Plasmid (m): sc-62005-SH, AWP1 shRNA (h) Lentiviral Particles: sc-62004-V and AWP1 shRNA (m) Lentiviral Particles: sc-62005-V.

Molecular Weight of AWP1: 23 kDa.

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.

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.

PROTOCOLS

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