AWP1 (C-14): sc-65007



The Power to Question

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 an 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 NF κ B 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

- Williams, K.J., et al. 1997. Development of a PCR-based allele-specific assay from an RFLP probe linked to resistance to cereal cyst nematode in wheat. Genome 39: 798-801.
- Duan, W., et al. 2000. Cloning and characterization of AWP, a novel protein that associates with serine/ threonine kinase PRK1 in vivo. Gene 256: 113-121.
- 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
- Lowes, D.A., et al. 2005. A microarray analysis of potential genes underlying the neuro-sensitivity of mice to propofol. Anesth. Analg. 101: 697-704.
- 6. Diatchenko, L., et al. 2005. Identification of novel mediators of NF κ B through genome-wide survey of monocyte adherence-induced genes. J. Leukoc. Biol. 78: 1366-1377.
- 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 NF κ B inhibitors. Trends Immunol. 27: 533-540.
- Hishiya, A., et al. 2006. A novel ubiquitin-binding protein ZNF216 functioning in muscle atrophy. EMBO J. 25: 554-564.

CHROMOSOMAL LOCATION

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

SOURCE

AWP1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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.

Blocking peptide available for competition studies, sc-65007 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AWP1 (C-14) 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 (C-14) is also recommended for detection of AWP1 in additional species, including equine, canine, bovine, porcine 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.



Try **AWP1 (B-5): sc-398513**, our highly recommended monoclonal alternative to AWP1 (C-14).