SANTA CRUZ BIOTECHNOLOGY, INC.

AWP1 (B-5): sc-398513

SANTA CRUZ BIOTECHNOLOGY

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 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

1. Williams, K.J., et al. 1996. 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.
2. Duan, W., et al. 2000. Cloning and characterization of AWP1, a novel protein that associates with serine/threonine kinase PRK1 *in vivo*. Gene 256: 113-121.
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, 180.
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.

CHROMOSOMAL LOCATION

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

SOURCE

AWP1 (B-5) is a mouse monoclonal antibody raised against amino acids 1-83 mapping at the N-terminus of AWP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AWP1 (B-5) is available conjugated to agarose (sc-398513 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398513 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398513 PE), fluorescein (sc-398513 FITC), Alexa Fluor® 488 (sc-398513 AF488), Alexa Fluor® 546 (sc-398513 AF546), Alexa Fluor® 594 (sc-398513 AF594) or Alexa Fluor® 647 (sc-398513 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398513 AF680) or Alexa Fluor® 790 (sc-398513 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

AWP1 (B-5) is recommended for detection of AWP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

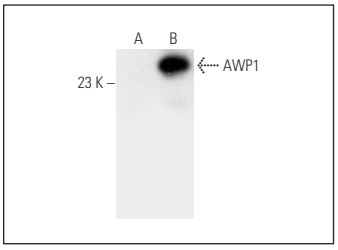
Molecular Weight of AWP1: 23 kDa.

Positive Controls: AWP1 (m): 293T Lysate: sc-126472.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



AWP1 (B-5): sc-398513. Western blot analysis of AWP1 expression in non-transfected: sc-117752 (**A**) and mouse AWP1 transfected: sc-126472 (**B**) 293T whole cell lysates.

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 for detailed protocols and support products.