# AWP1 (m): 293T Lysate: sc-126472



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 NF $\kappa$ 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**

- 1. Williams, K.J., Fisher, J.M. and Langridge, P. 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., Sun, B., Li, T.W., Tan, B.J., Lee, M.K. and Teo, T.S. 2000. Cloning and characterization of AWP, a novel protein that associates with serine/threonine kinase PRK1 *in vivo*. Gene 256: 113-121.
- Mukhopadhyay, A., Vij, S. and Tyagi, A.K. 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.
- Cao, Y.K., Mo, Y.Y., Tian, F.Z., Liu, Y.W., Deng, P., Qin, Q.H. and Jiang, Y. 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.
- Lowes, D.A., Galley, H.F., Lowe, P.R., Rikke, B.A., Johnson, T.E. and Webster, N.R. 2005. A microarray analysis of potential genes underlying the neurosensitivity of mice to propofol. Anesth. Analg. 101: 697-704.
- Diatchenko, L., Romanov, S., Malinina, I., Clarke, J., Tchivilev, I., Li, X. and Makarov, S.S. 2005. Identification of novel mediators of NFκB through genome-wide survey of monocyte adherence-induced genes. J. Leukoc. Biol. 78: 1366-1377.
- Dash, D.P., Silvestri, G. and Hughes, A.E. 2006. Fine mapping of the keratoconus with cataract locus on chromosome 15q and candidate gene analysis. Mol. Vis. 12: 499-505.
- 8. Wullaert, A., Heyninck, K., Janssens, S. and Beyaert, R. 2006. Ubiquitin: tool and target for intracellular NFκB inhibitors. Trends Immunol. 27: 533-540.
- Hishiya, A., Iemura, S., Natsume, T., Takayama, S., Ikeda, K. and Watanabe, K. 2006. A novel ubiquitin-binding protein ZNF216 functioning in muscle atrophy. EMBO J. 25: 554-564.

## **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.

## **CHROMOSOMAL LOCATION**

Genetic locus: Zfand6 (mouse) mapping to 7 D3.

#### **PRODUCT**

AWP1 (m): 293T Lysate represents a lysate of mouse AWP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## **APPLICATIONS**

AWP1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive AWP1 antibodies. Recommended use: 10-20 µl per lane.

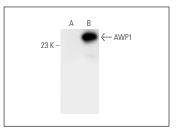
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

AWP1 (B-5): sc-398513 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse AWP1 expression in AWP1 transfected 293T 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-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## 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 Ivsates.

## **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.