SANTA CRUZ BIOTECHNOLOGY, INC.

AIP2 (N-15): sc-11896

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Atrophin interacting proteins (AIPs) bind to atrophin-1 in the vicinity of the polyglutamine tract. The WW domain consists of 35-40 amino acids and is characterized by four well conserved aromatic residues, two of which are tryptophan. All five AIPs contain multiple WW domains and can be divided into two distinct classes. AIP1 and AIP3 (WWP3) are MAGUK-like multidomain proteins containing a guanylate kinase-like region, two WW domains, and multiple PDZ domains. AIP2 (WWP2), AIP4 (itchy), and AIP5 (WWP1) are highly homologous, each having four WW domains and a HECT domain characteristic of ubiquitin ligases. These interactors are similar to isolated huntingtin-interacting proteins, suggesting commonality of function between two families of proteins responsible for similar diseases.

REFERENCES

1. Bork, P. and Sudol, M. 1994. The WW domain: a signalling site in dystrophin? Trends Biochem. Sci. 19: 531-533.
2. Andre, B. and Springael, J.Y. 1994. WWP, a new amino acid motif present in single or multiple copies in various proteins including dystrophin and the SH3-binding Yes-associated protein YAP65. Biochem. Biophys. Res. Commun. 205: 1201-1205.
3. Hofmann, K. and Bucher, P. 1995. The Rsp5-domain is shared by proteins of diverse functions. FEBS Lett. 358: 153-157.
4. Pirozzi, G., et al. 1997. Identification of novel human WW domain-containing proteins by cloning of ligand targets. J. Biol. Chem. 272: 14611-14616.
5. Perry, W.L., et al. 1998. The itchy locus encodes a novel ubiquitin protein ligase that is disrupted in a18H mice. Nat. Genet. 18: 143-146.
6. Wood, J.D., et al. 1998. Atrophin-1, the DRPLA gene product, interacts with two families of WW domain-containing proteins. Mol. Cell Neurosci. 11: 149-160.

CHROMOSOMAL LOCATION

Genetic locus: WWP2 (human) mapping to 16q22.1; Wwp2 (mouse) mapping to 8 D3.

SOURCE

AIP2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of AIP2 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-11896 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

AIP2 (N-15) is recommended for detection of AIP2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

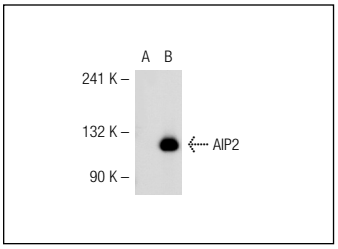
AIP2 (N-15) is also recommended for detection of AIP2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for AIP2 siRNA (h): sc-40362, AIP2 siRNA (m): sc-40363, AIP2 shRNA Plasmid (h): sc-40362-SH, AIP2 shRNA Plasmid (m): sc-40363-SH, AIP2 shRNA (h) Lentiviral Particles: sc-40362-V and AIP2 shRNA (m) Lentiviral Particles: sc-40363-V.

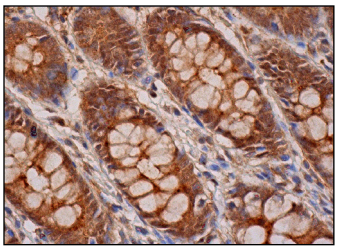
Molecular Weight of AIP2: 99-110 kDa.

Positive Controls: AIP2 (h2): 293T Lysate: sc-116898.

DATA



AIP2 (N-15): sc-11896. Western blot analysis of AIP2 expression in non-transfected: sc-117752 (**A**) and human AIP2 transfected: sc-116898 (**B**) 293T whole cell lysates.



AIP2 (N-15): sc-11896. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic and nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Miyaki, S., et al. 2010. MicroRNA-140 plays dual roles in both cartilage development and homeostasis. Genes Dev. 24: 1173-1185.

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.

MONOS Satisfaction Guaranteed

Try **AIP2 (A-3): sc-398090** or **AIP2 (G-9): sc-166240**, our highly recommended monoclonal alternatives to AIP2 (N-15).