SANTA CRUZ BIOTECHNOLOGY, INC.

AIP5 (N-20): sc-11892

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 4 well conserved aromatic residues, 2 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., McConnell, S.J., Uveges, A.J., Carter, J.M., Sparks, A.B., Kay, B.K. and Fowlkes, D.M. 1997. Identification of novel human WW domain-containing proteins by cloning of ligand targets. J. Biol. Chem. 272: 14611-14616.
5. Perry, W.L., Hustad, C.M., Swing, D.A., O'Sullivan, T.N., Jenkins, N.A. and Copeland, N.G. 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., Yuan, J., Margolis, R.L., Colomer, V., Duan, K., Kushi, J., Kaminsky, Z., Kleiderlein, J.J., Sharp, A.H. and Ross, C.A. 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: WWP1 (human) mapping to 8q21.3; Wwp1 (mouse) mapping to 4 A3.

SOURCE

AIP5 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of AIP5 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-11892 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AIP5 (N-20) is recommended for detection of AIP5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

AIP5 (N-20) is also recommended for detection of AIP5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for AIP5 siRNA (h): sc-40366, AIP5 siRNA (m): sc-40367, AIP5 shRNA Plasmid (h): sc-40366-SH, AIP5 shRNA Plasmid (m): sc-40367-SH, AIP5 shRNA (h) Lentiviral Particles: sc-40366-V and AIP5 shRNA (m) Lentiviral Particles: sc-40367-V.

Molecular Weight of AIP5: 105 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SJRH30 cell lysate: sc-2287 or JAR cell lysate: sc-2276.

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) 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.