

AIP5 (F-3): sc-390897

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.

CHROMOSOMAL LOCATION

Genetic locus: WWP1 (human) mapping to 8q21.3; Wwp1 (mouse) mapping to 4 A3.

SOURCE

AIP5 (F-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 88-312 within an internal region of AIP5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AIP5 (F-3) is available conjugated to agarose (sc-390897 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390897 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390897 PE), fluorescein (sc-390897 FITC), Alexa Fluor® 488 (sc-390897 AF488), Alexa Fluor® 546 (sc-390897 AF546), Alexa Fluor® 594 (sc-390897 AF594) or Alexa Fluor® 647 (sc-390897 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390897 AF680) or Alexa Fluor® 790 (sc-390897 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390897 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

AIP5 (F-3) is recommended for detection of AIP5 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 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.

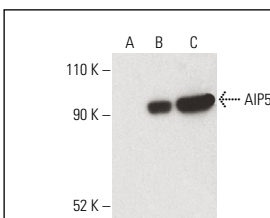
Molecular Weight of AIP5: 105 kDa.

Positive Controls: AIP5 (h): 293T Lysate: sc-176806 or K-562 whole cell lysate: sc-2203.

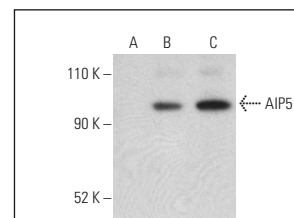
RECOMMENDED SUPPORT REAGENTS

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



AIP5 (F-3): sc-390897. Western blot analysis of AIP5 expression in non-transfected 293T: sc-117752 (A), human AIP5 transfected 293T: sc-176806 (B) and K-562 (C) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



AIP5 (F-3): sc-390897. Western blot analysis of AIP5 expression in non-transfected 293T: sc-117752 (A), human AIP5 transfected 293T: sc-176806 (B) and K-562 (C) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Zhou, H., et al. 2024. GPRC5A promotes lung colonization of esophageal squamous cell carcinoma. *Nat. Commun.* 15: 9950.

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.