

AIDA-1 (H-208): sc-135336

BACKGROUND

The β -Amyloid protein precursor (AbPP) is a widely expressed transmembrane protein that is processed into the β -Amyloid (Ab) peptide, which accumulates in insoluble plaques in the brain of Alzheimer's disease patients and AbPP intracellular domain (AID). AID may function as a pro-apoptotic peptide, a regulator of calcium homeostasis and a molecule involved in transcriptional regulation. The AID associated protein 1 (AIDA-1) is highly expressed in the brain and is regulated by AbPP. It interacts with AbPP to play a role in brain development. AIDA-1 also interacts with coilin in Cajal bodies to regulate pre-mRNA splicing.

REFERENCES

1. Fu, X., et al. 1999. EB-1, a tyrosine kinase signal transduction gene, is transcriptionally activated in the t(1;19) subset of pre-B ALL, which express oncoprotein E2a-Pbx1. *Oncogene* 18: 4920-4929.
2. Wiemels, J.L., et al. 2002. Related Site-specific translocation and evidence of postnatal origin of the t(1;19) E2A-PBX1 fusion in childhood acute lymphoblastic leukemia. *Proc. Natl. Acad. Sci. USA* 99: 15101-15106.
3. Petersen, H.H., et al. 2003. Functional interaction of megalin with the megalinbinding protein (MegBP), a novel tetratricopeptide repeat-containing adaptor molecule. *J. Cell Sci.* 116: 453-461.
4. LeBrun, D.P. 2003. E2A basic helix-loop-helix transcription factors in human leukemia. *Front. Biosci.* 8: s206-s222.
5. Liu, F., et al. 2003. Regulation of amyloid precursor protein expression and secretion via activation of ERK1/2 by hepatocyte growth factor in HEK293 cells transfected with APP751. *Exp. Cell Res.* 287: 387-396.
6. Ghersi, E., et al. 2004. The intracellular localization of amyloid β protein precursor (A β PP) intracellular domain associated protein-1 (AIDA-1) is regulated by A β PP and alternative splicing. *J. Alzheimers Dis.* 6: 67-78.
7. Klodzinska, A., et al. 2004. The anxiolytic-like activity of AIDA (1-aminoindan-1,5-dicarboxylic acid), an mGlu 1 receptor antagonist. *J. Physiol. Pharmacol.* 55: 113-126.

CHROMOSOMAL LOCATION

Genetic locus: ANKS1B (human) mapping to 12q23.1; Anks1b (mouse) mapping to 10 C2.

SOURCE

AIDA-1 (H-208) is a rabbit polyclonal antibody raised against amino acids 847-1054 mapping near the C-terminus of AIDA-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

AIDA-1 (H-208) is recommended for detection of AIDA-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); recommended for detection of all AIDA-1 isoforms.

AIDA-1 (H-208) is also recommended for detection of AIDA-1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for AIDA-1 siRNA (h): sc-60141, AIDA-1 siRNA (m): sc-60142, AIDA-1 shRNA Plasmid (h): sc-60141-SH, AIDA-1 shRNA Plasmid (m): sc-60142-SH, AIDA-1 shRNA (h) Lentiviral Particles: sc-60141-V and AIDA-1 shRNA (m) Lentiviral Particles: sc-60142-V.

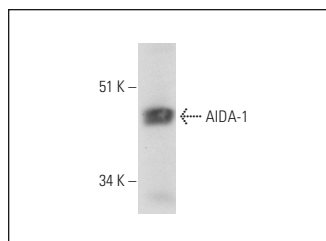
Molecular Weight of AIDA-1 eight isoforms: 40-58/85/138 kDa.

Positive Controls: NCI-H292 whole cell lysate: sc-364179.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



AIDA-1 (H-208): sc-135336. Western blot analysis of AIDA-1 expression in NCI-H292 whole cell lysate.

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.