

AIDA-1 (C-20): sc-50796

BACKGROUND

The β -Amyloid protein precursor (A β PP) 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 A β PP 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 A β PP. It interacts with A β PP to play a role in brain development. AIDA-1 also interacts with coilin in Cajal bodies to regulate pre-mRNA splicing.

REFERENCES

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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 megalin binding 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: 206-222.
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 β -Amyloid 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.

CHROMOSOMAL LOCATION

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

SOURCE

AIDA-1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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.

Blocking peptide available for competition studies, sc-50796 P, (100 μ g 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

AIDA-1 (C-20) 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); non cross-reactive with isoform B.

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.

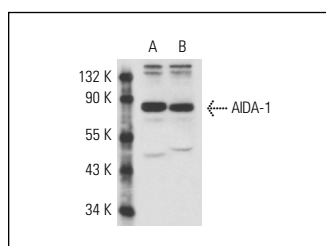
Molecular Weight of AIDA-1 isoforms: 40-58/85/138 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



AIDA-1 (C-20): sc-50796. Western blot analysis of AIDA-1 expression in mouse brain (A) and rat brain (B) tissue extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **AIDA-1 (C-10): sc-376610**, our highly recommended monoclonal alternative to AIDA-1 (C-20).