SANTA CRUZ BIOTECHNOLOGY, INC.

AIDA-1 (C-10): sc-376610

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The β-Amyloid protein precursor (AβPP) is a widely expressed transmembrane protein that is processed into the β-Amyloid (Aβ) peptide, which accumulates in insoluble plaques in the brain of Alzheimer's disease patients and AβPP 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 AβPP. It interacts with AβPP 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 tetratrico peptide 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.

CHROMOSOMAL LOCATION

Genetic locus: ANKS1B (human) mapping to 12q23.1.

SOURCE

AIDA-1 (C-10) is a mouse monoclonal antibody raised against amino acids 847-1054 mapping near the C-terminus of AIDA-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AIDA-1 (C-10) is available conjugated to agarose (sc-376610 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376610 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376610 PE), fluorescein (sc-376610 FITC), Alexa Fluor® 488 (sc-376610 AF488), Alexa Fluor® 546 (sc-376610 AF546), Alexa Fluor® 594 (sc-376610 AF594) or Alexa Fluor® 647 (sc-376610 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376610 AF680) or Alexa Fluor® 790 (sc-376610 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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-10) is recommended for detection of AIDA-1 of 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).

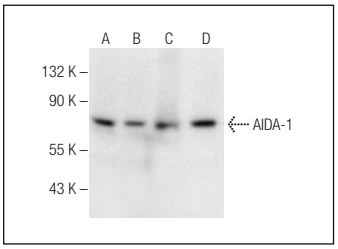
AIDA-1 (C-10) is also recommended for detection of AIDA-1 in additional species, including equine and canine.

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

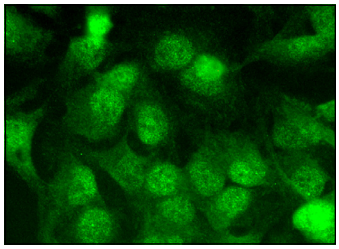
Molecular Weight of eight AIDA-1 isoforms: 40-58/85/138 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, U-87 MG cell lysate: sc-2411 or SK-N-MC cell lysate: sc-2237.

DATA



AIDA-1 (C-10): sc-376610. Western blot analysis of AIDA-1 expression in LNCaP (**A**), U-87 MG (**B**), NCI-H929 (**C**) and SK-N-MC (**D**) whole cell lysates.



AIDA-1 (C-10): sc-376610. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and membrane localization.

SELECT PRODUCT CITATIONS

1. Enga, R.M., et al. 2017. Initial characterization of behavior and ketamine response in a mouse knockout of the post-synaptic effector gene Anks1b. Neurosci. Lett. 641: 26-32.
2. Carbonell, A.U., et al. 2019. Haploinsufficiency in the ANKS1B gene encoding AIDA-1 leads to a neurodevelopmental syndrome. Nat. Commun. 10: 3529.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.