ASZ1 (C-20): sc-79852



The Power to Question

BACKGROUND

ASZ1 (ankyrin repeat, SAM and basic leucine zipper domain-containing protein 1), also known as ANKL1, ALP1 (ankyrin-like protein 1), GASZ (germ cell-specific ankyrin, SAM and basic leucine zipper domain-containing protein) or Orf3, is a 475 amino acid protein that is suggested to function as a signal transducer during germ cell maturation. Localized to the cytoplasm of pachytene spermatocytes, early spermatids and oocytes, ASZ1 is primarily found in adult testis and ovary where it mediates protein-protein interactions. ASZ1 contains six ANK repeats, one SAM (sterile α motif) domain and is encoded by a gene located on human chromosome 7q31.2, a region that may have an important role in the development certain types of human cancer.

REFERENCES

- Zenklusen, J.C., Conti, C.J. and Green, E.D. 2001. Mutational and functional analyses reveal that ST7 is a highly conserved tumor-suppressor gene on human chromosome 7q31. Nat. Genet. 27: 392-398.
- Katoh, M. 2002. Molecular cloning and characterization of ST7R (ST7-like, ST7L) on human chromosome 1p13, a novel gene homologous to tumor suppressor gene ST7 on human chromosome 7q31. Int. J. Oncol. 20: 1247-1253.
- Yan, W., Rajkovic, A., Viveiros, M.M., Burns, K.H., Eppig, J.J. and Matzuk, M.M. 2002. Identification of Gasz, an evolutionarily conserved gene expressed exclusively in germ cells and encoding a protein with four ankyrin repeats, a sterile-α motif, and a basic leucine zipper. Mol. Endocrinol. 16: 1168-1184.
- Yan, W., Ma, L., Zilinski, C.A. and Matzuk, M.M. 2004. Identification and characterization of evolutionarily conserved pufferfish, zebrafish, and frog orthologs of GASZ. Biol. Reprod. 70: 1619-1625.
- Zink, D., Amaral, M.D., Englmann, A., Lang, S., Clarke, L.A., Rudolph, C., Alt, F., Luther, K., Braz, C., Sadoni, N., Rosenecker, J. and Schindelhauer, D. 2004. Transcription-dependent spatial arrangements of CFTR and adjacent genes in human cell nuclei. J. Cell Biol. 166: 815-825.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 605797. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: ASZ1 (human) mapping to 7q31.2; Asz1 (mouse) mapping to 6 A2.

SOURCE

ASZ1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ASZ1 of human origin.

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.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79852 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ASZ1 (C-20) is recommended for detection of ASZ1 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).

Suitable for use as control antibody for ASZ1 siRNA (h): sc-72573, ASZ1 siRNA (m): sc-72574, ASZ1 shRNA Plasmid (h): sc-72573-SH, ASZ1 shRNA Plasmid (m): sc-72574-SH, ASZ1 shRNA (h) Lentiviral Particles: sc-72573-V and ASZ1 shRNA (m) Lentiviral Particles: sc-72574-V.

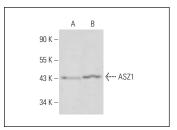
Molecular Weight of ASZ1: 53 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181 or HeLa whole cell lysate: sc-2200.

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



ASZ1 (C-20): sc-79852. Western blot analysis of ASZ1 expression in NTERA-2 cl.D1 (**A**) and HeLa (**B**) whole cell lysates

PROTOCOLS

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