

Zic1 (1A8): sc-517106

BACKGROUND

Zic1 (zinc finger protein of the cerebellum 1) is a C₂H₂ zinc finger transcription factor that controls the expansion of neuronal precursors by inhibiting the progression of neuronal differentiation. Zic1 determines the cerebellar folial pattern by influencing proliferation in the external germinal layer (EGL). Zic1 can bind and transactivate the apolipoprotein E gene. This gene is closely linked to the gene encoding zinc finger protein of the cerebellum 4, a related family member on chromosome 3.

REFERENCES

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- Aruga, J., et al. 1998. Mouse Zic1 is involved in cerebellar development. *J. Neurosci.* 18: 284-293.
- Ogura, H., et al. 2001. Behavioral abnormalities of Zic1 and Zic2 mutant mice: implications as models for human neurological disorders. *Behav. Genet.* 31: 317-324.
- Salero, E., et al. 2001. Transcription factors Zic1 and Zic2 bind and transactivate the apolipoprotein E gene promoter. *J. Biol. Chem.* 276: 1881-1888.
- Aruga, J., et al. 2002. Zic1 promotes the expansion of dorsal neural progenitors in spinal cord by inhibiting neuronal differentiation. *Dev. Biol.* 244: 329-341.
- Ebert, P.J., et al. 2003. Zic1 represses Math1 expression via interactions with the Math1 enhancer and modulation of Math1 autoregulation. *Development* 130: 1949-1959.
- Grinberg, I., et al. 2004. Heterozygous deletion of the linked genes Zic1 and Zic4 is involved in Dandy-Walker malformation. *Nat. Genet.* 36: 1053-1055.
- LocusLink Report (LocusID: 7545). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: ZIC1 (human) mapping to 3q24; Zic1 (mouse) mapping to 9 E3.3.

SOURCE

Zic1 (1A8) is a mouse monoclonal antibody raised against amino acids 139-212 representing full length Zic1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml 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

Zic1 (1A8) is recommended for detection of Zic1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

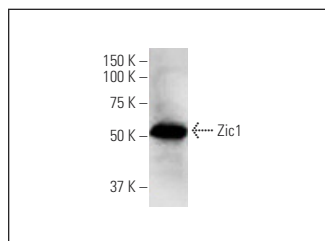
Suitable for use as control antibody for Zic1 siRNA (h): sc-106710, Zic1 siRNA (m): sc-155609, Zic1 shRNA Plasmid (h): sc-106710-SH, Zic1 shRNA Plasmid (m): sc-155609-SH, Zic1 shRNA (h) Lentiviral Particles: sc-106710-V and Zic1 shRNA (m) Lentiviral Particles: sc-155609-V.

Positive Controls: PC-12 cell lysate: sc-2250.

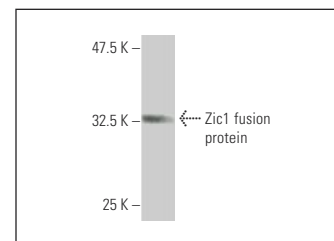
RECOMMENDED SUPPORT REAGENTS

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, 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).

DATA



Zic1 (1A8): sc-517106. Western blot analysis of Zic1 expression in PC-12 whole cell lysate.



Zic1 (1A8): sc-517106. Western blot analysis of human recombinant Zic1 fusion protein.

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.