

CSDA (F-23): sc-133798

BACKGROUND

CSDA (cold shock domain protein A), also known as DBPA, CSDA1 or ZONAB (zonula occludens 1-associated nucleic acid-binding protein), is a 372 amino acid nuclear and cytoplasmic protein that is highly expressed in skeletal muscle and heart. Containing one CSD (cold-shock) domain, CSDA is thought to bind to GM-CSF promoter, full length mRNA and to short RNA sequences containing a specific consensus site. CSDA is suggested to have a role in translation repression and is found in a mRNP complex with MSY2. MSY2 belongs to the Y-box family of multifunctional proteins that regulate both transcription and translation. CSDA participates in promoting cell proliferation and expression of cyclin D1 and proliferating cell nuclear antigen (PCNA). CSDA is regarded to be an important component of the mechanisms that sense epithelial density and in regulating the switch between proliferation and differentiation through complex transcriptional networks.

REFERENCES

1. Penes, M.C., et al. 2005. Expression of zonula occludens-1 (ZO-1) and the transcription factor ZO-1-associated nucleic acid-binding protein (ZONAB)-MsY3 in glial cells and co-localization at oligodendrocyte and astrocyte gap junctions in mouse brain. *Eur. J. Neurosci.* 22: 404-418.
2. Kavanagh, E., et al. 2006. Functional interaction between the ZO-1-interacting transcription factor ZONAB/DbpA and the RNA processing factor symplekin. *J. Cell. Sci.* 119: 5098-5105.
3. Sourisseau, T., et al. 2006. Regulation of PCNA and cyclin D1 expression and epithelial morphogenesis by the ZO-1-regulated transcription factor ZONAB/DbpA. *Mol. Cell. Biol.* 26: 2387-2398.
4. Pannequin, J., et al. 2007. Phosphatidylethanol accumulation promotes intestinal hyperplasia by inducing ZONAB-mediated cell density increase in response to chronic ethanol exposure. *Mol. Cancer Res.* 5: 1147-1157.
5. Li, X., et al. 2008. Ablation of Cx47 in transgenic mice leads to the loss of MUPP1, ZONAB and multiple connexins at oligodendrocyte-astrocyte gap junctions. *Eur. J. Neurosci.* 28: 1503-1517.

CHROMOSOMAL LOCATION

Genetic locus: CSDA (human) mapping to 12p13.2.

SOURCE

CSDA (F-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic CSDA peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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.

APPLICATIONS

CSDA (F-23) is recommended for detection of CSDA of 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 CSDA siRNA (h): sc-38632, CSDA shRNA Plasmid (h): sc-38632-SH and CSDA shRNA (h) Lentiviral Particles: sc-38632-V.

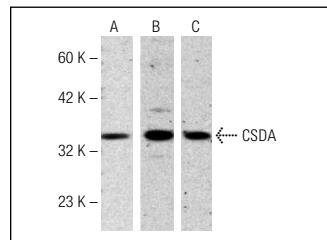
Molecular Weight of CSDA: 40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Hep G2 cell lysate: sc-2227 or human fetal muscle tissue extract.

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).

DATA



CSDA (F-23): sc-133798. Western blot analysis of CSDA expression in Jurkat (A) and Hep G2 (B) whole cell lysate and human fetal muscle (C) tissue extract.

PROTOCOLS

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



Try **CSDA (A-2L): sc-130419**, our highly recommended monoclonal alternative to CSDA (F-23).