

# CSDA (A-2L): sc-130419

## 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 (A-2L) is a mouse monoclonal antibody raised against recombinant CSDA of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of 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.

## RESEARCH USE

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

## APPLICATIONS

CSDA (A-2L) is recommended for detection of CSDA of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

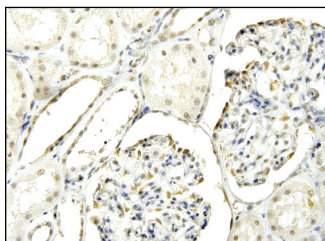
Suitable for use as control antibody for CSDA siRNA (h): sc-38632, CSDA shRNA Plasmid (h): sc-38632-SH and CSDA shRNA (h) Lentiviral Particles: sc-38632-V.

Molecular Weight of CSDA: 40 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



CSDA (A-2L): sc-130419. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic localization.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.