

CSMD2 (D-18): sc-68455

BACKGROUND

The CUB and sushi domain-containing proteins, CSMD1-3, are membrane proteins that are involved in cell-cell adhesion and are weakly expressed in most tissues, with higher levels of expression observed in the cerebellum and hippocampus. CSMD1 is part of the complement system that defends against pathogens through either the classical pathway or the alternative pathway. Located primarily in nerve growth cones, CSMD1 blocks the classical pathway of the immune system and is thought to be involved in tumor suppression, as defects in the gene encoding CSMD1 are associated with squamous cell carcinomas. CSMD2 and CSMD3 are located primarily in the brain and are implicated in some forms of head and neck cancer. Additionally, the CSMD3 gene is a candidate for induction of epileptic seizures.

REFERENCES

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2. Lau, W.L. and Scholnick, S.B. 2003. Identification of two new members of the CSMD gene family small star, filled. *Genomics* 82: 412-415.
3. Shimizu, A., Asakawa, S., Sasaki, T., Yamazaki, S., Yamagata, H., Kudoh, J., Minoshima, S., Kondo, I. and Shimizu, N. 2003. A novel giant gene CSMD3 encoding a protein with CUB and sushi multiple domains: a candidate gene for benign adult familial myoclonic epilepsy on human chromosome 8q23.3-q24.1. *Biochem. Biophys. Res. Commun.* 309: 143-154.
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5. Richter, T.M., Tong, B.D. and Scholnick, S.B. 2005. Epigenetic inactivation and aberrant transcription of CSMD1 in squamous cell carcinoma cell lines. *Cancer Cell Int.* 5: 29.

CHROMOSOMAL LOCATION

Genetic locus: CSMD2 (human) mapping to 1p35.1.

SOURCE

CSMD2 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CSMD2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68455 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CSMD2 (D-18) is recommended for detection of CSMD2 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)], 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).

CSMD2 (D-18) is also recommended for detection of CSMD2 in additional species, including equine, bovine and avian.

Suitable for use as control antibody for CSMD2 siRNA (h): sc-77036, CSMD2 shRNA Plasmid (h): sc-77036-SH and CSMD2 shRNA (h) Lentiviral Particles: sc-77036-V.

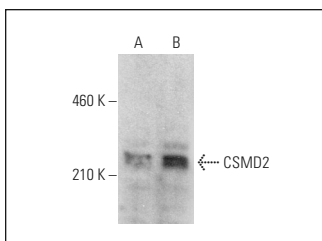
Molecular Weight of CSMD2: 380 kDa.

Positive Controls: MEG-01 cell lysate: sc-2283 or K-562 whole cell lysate: sc-2203.

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



CSMD2 (D-18): sc-68455. Western blot analysis of CSMD2 expression in K-562 (A) and MEG-01 (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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