

# CSMD1 (E-20): sc-68277

## 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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## CHROMOSOMAL LOCATION

Genetic locus: CSMD1 (human) mapping to 8p23.2; Csm1 (mouse) mapping to 8 A1.1.

## SOURCE

CSMD1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CSMD1 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.

## 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-68277 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CSMD1 (E-20) is recommended for detection of CSMD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CSMD1 (E-20) is also recommended for detection of CSMD1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for CSMD1 siRNA (h): sc-77034, CSMD1 siRNA (m): sc-77035, CSMD1 shRNA Plasmid (h): sc-77034-SH, CSMD1 shRNA Plasmid (m): sc-77035-SH, CSMD1 shRNA (h) Lentiviral Particles: sc-77034-V and CSMD1 shRNA (m) Lentiviral Particles: sc-77035-V.

Molecular Weight of CSMD1: 389 kDa.

## 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) 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.

## RESEARCH USE

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

## PROTOCOLS

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