

SEMA4C (C-14): sc-169282

BACKGROUND

Semaphorins are a family of cell surface and secreted proteins that are conserved from insects to humans. Members of this family are defined by a conserved extracellular sema domain of approximately 500 amino acids containing 14-16 cysteines, blocks of conserved sequences and no obvious repeats. Secreted and cell-bound semaphorins chemically attract and repel the growth of neural axons, guiding the development of intricate networks of neural tissue. SEMA4C (semaphorin-4C), also known as SEMAF, is an 833 amino acid single-pass type I membrane protein that contains one sema domain, one PSI domain and one Ig-like C2-type domain. Expressed in a variety of tissues, including lung, kidney and brain, SEMA4C interacts with GIPC and NCDN and is thought to play a role in the formation of neural networks during development.

CHROMOSOMAL LOCATION

Genetic locus: SEMA4C (human) mapping to 2q11.2; Sema4c (mouse) mapping to 1 B.

SOURCE

SEMA4C (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of SEMA4C of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-169282 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

SEMA4C (C-14) is recommended for detection of SEMA4C 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)], 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); non cross-reactive with other SEMA4 family members.

SEMA4C (C-14) is also recommended for detection of SEMA4C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SEMA4C siRNA (h): sc-94903, SEMA4C siRNA (m): sc-153334, SEMA4C shRNA Plasmid (h): sc-94903-SH, SEMA4C shRNA Plasmid (m): sc-153334-SH, SEMA4C shRNA (h) Lentiviral Particles: sc-94903-V and SEMA4C shRNA (m) Lentiviral Particles: sc-153334-V.

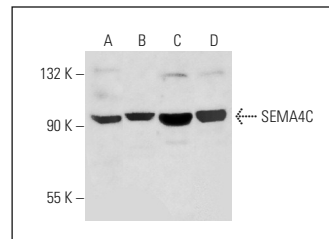
Molecular Weight of SEMA4C: 100 kDa.

Positive Controls: SW-13 cell lysate: sc-24778, K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

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



SEMA4C (C-14): sc-169282. Western blot analysis of SEMA4C expression in PC-12 (A), SW-13 (B), K-562 (C) and MCF7 (D) 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.


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Try **SEMA4C (37): sc-136445** or **SEMA (A-12): sc-74554**, our highly recommended monoclonal alternatives to SEMA4C (C-14).