

SEMA7A (H-41): sc-135263

BACKGROUND

Semaphorins comprise a family of cell surface and secreted proteins that are conserved from insects to humans. Members of this family of proteins are approximately 750 amino acids in length (including signal sequences) and are defined by a conserved extracellular "semaphorin" domain of approximately 500 amino acids containing 14-16 cysteines, many blocks of conserved sequences and no obvious repeats. The transmembrane semaphorins are characterized by an additional 80 amino acid transmembrane domain and an 80-110 amino acid cytoplasmic domain. These semaphorin proteins regulate the growth of the axons during embryogenesis by repelling growth cones from regions of high semaphorin expression. Semaphorin 7A (SEMA7A), also designated CD108, promotes axonal growth in the central nervous system and plays a critical role in negative regulation of T cell activation and function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEMA7A (human) mapping to 15q24.1; *Sema7a* (mouse) mapping to 9 B.

SOURCE

SEMA7A (H-41) is a rabbit polyclonal antibody raised against amino acids 371-411 mapping within an internal region of SEMA7A 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.

STORAGE

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

APPLICATIONS

SEMA7A (H-41) is recommended for detection of SEMA7A 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).

SEMA7A (H-41) is also recommended for detection of SEMA7A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SEMA7A siRNA (h): sc-63010, SEMA7A siRNA (m): sc-63011, SEMA7A shRNA Plasmid (h): sc-63010-SH, SEMA7A shRNA Plasmid (m): sc-63011-SH, SEMA7A shRNA (h) Lentiviral Particles: sc-63010-V and SEMA7A shRNA (m) Lentiviral Particles: sc-63011-V.

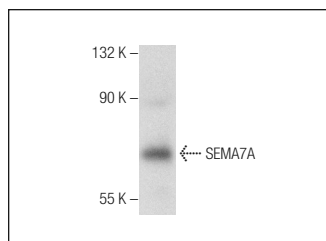
Molecular Weight of SEMA7A: 80 kDa.

Positive Controls: human erythrocytes whole cell lysate.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SEMA7A (H-41): sc-135263. Western blot analysis of SEMA7A expression in human erythrocyte whole cell lysate.

RESEARCH USE

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

MONOS
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Try **SEMA7A (C-6): sc-374432** or **SEMA7A (D-4): sc-376149**, our highly recommended monoclonal alternatives to SEMA7A (H-41).