



SEMA6C (Ex-14): sc-74277

BACKGROUND

Semaphorins are a family of cell surface and secreted proteins involved in neural development that are conserved from insects to humans. Members of this family 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, 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. SEMA6C, also known as SEMA Y, is a transmembrane protein expressed in fetal brain and adult skeletal muscle. Three isoforms of this semaphorin exist due to alternative splicing: SEMA6C 1, SEMA6C 2 and SEMA6C 3. The extracellular domain of SEMA6C induces growth cone collapse of dorsal root ganglion and plays a role in generation or stability of entorhino-hippocampal synapses.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEMA6C (human) mapping to 1q21.3; Sema6c (mouse) mapping to 3 F2.1.

SOURCE

SEMA6C (Ex-14) is a rat monoclonal antibody raised against an extracellular domain of SEMA6C of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

SEMA6C (Ex-14) is recommended for detection of SEMA6C 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with SEMA3B, SEMA3C, SEMA3E, SEMA3F, SEMA6A, SEMA6D or SEMA7A of mouse origin or SEMA3A or SEMA6B of human origin.

Suitable for use as control antibody for SEMA6C siRNA (h): sc-76472, SEMA6C siRNA (m): sc-76473, SEMA6C shRNA Plasmid (h): sc-76472-SH, SEMA6C shRNA Plasmid (m): sc-76473-SH, SEMA6C shRNA (h) Lentiviral Particles: sc-76472-V and SEMA6C shRNA (m) Lentiviral Particles: sc-76473-V.

Molecular Weight of SEMA6C: 140 kDa.

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.

PROTOCOLS

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