

IGSF9 (C-20): sc-240584

BACKGROUND

Ig (immunoglobulin) superfamily members exhibit functional characteristics including immune responses, growth factor signaling and cell adhesion. IGSF9 (immunoglobulin superfamily, member 9), also known as Nrt1 or IGSF9A, is a 1,179 amino acid single-pass type I membrane protein expressed in a wide variety of fetal tissues at eight and fourteen weeks of gestation. Belonging to the immunoglobulin superfamily and the Turtle family, IGSF9 is thought to play a role in dendrite outgrowth and synapse maturation. IGSF9 contains two fibronectin type-III domains and five Ig-like (immunoglobulin-like) domains. IGSF9 interacts with MAGI-2 and Shank 1, both of which contain SH3 (Src-homology 3) domains. Protein-protein interactions are central events in cellular signal transduction and are often mediated by SH3 domains. IGSF9 is encoded by a gene located on human chromosome 1q23.2 and mouse chromosome 1 H3.

REFERENCES

1. Lim, W.A., et al. 1994. Structural determinants of peptide-binding orientation and of sequence specificity in SH3 domains. *Nature* 372: 375-379.
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3. Luo, K., et al. 2001. DlgR1, a novel membrane receptor of the immunoglobulin gene superfamily, is preferentially expressed by antigen-presenting cells. *Biochem. Biophys. Res. Commun.* 287: 35-41.
4. Doudney, K., et al. 2002. Cloning and characterization of Igsf9 in mouse and human: a new member of the immunoglobulin superfamily expressed in the developing nervous system. *Genomics* 79: 663-670.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609738. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Robakis, T., et al. 2008. An internal signal sequence directs intramembrane proteolysis of a cellular immunoglobulin domain protein. *J. Biol. Chem.* 283: 36369-36376.
7. Ferguson, K., et al. 2009. The conserved Ig superfamily member Turtle mediates axonal tiling in *Drosophila*. *J. Neurosci.* 29: 14151-14159.

CHROMOSOMAL LOCATION

Genetic locus: IGSF9 (human) mapping to 1q23.2; Igsf9 (mouse) mapping to 1 H3.

SOURCE

IGSF9 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of IGSF9 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-240584 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IGSF9 (C-20) is recommended for detection of IGSF9 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); non cross-reactive with other IGSF family members.

IGSF9 (C-20) is also recommended for detection of IGSF9 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for IGSF9 siRNA (h): sc-88823, IGSF9 siRNA (m): sc-146193, IGSF9 shRNA Plasmid (h): sc-88823-SH, IGSF9 shRNA Plasmid (m): sc-146193-SH, IGSF9 shRNA (h) Lentiviral Particles: sc-88823-V and IGSF9 shRNA (m) Lentiviral Particles: sc-146193-V.

Molecular Weight of IGSF9: 127 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 or our catalog for detailed protocols and support products.