

Gliomedin (G-20): sc-68184

BACKGROUND

Gliomedin is a 551 amino acid protein encoded by the human gene GLDN. Gliomedin is thought to play a role in the formation of the nodes of Ranvier along myelinated axons. Accumulation of Na⁺ channels at the nodes of Ranvier is a prerequisite for saltatory conduction. In peripheral nerves, clustering of these channels along the axolemma is regulated by myelinating Schwann cells through an unknown mechanism. Gliomedin is a glial ligand for Neurofascin and NrCAM, two axonal immunoglobulin cell adhesion molecules that are associated with Na⁺ channels at the nodes of Ranvier. Gliomedin is expressed by myelinating Schwann cells and accumulates at the edges of each myelin segment during development, where it aligns with the forming nodes. Gliomedin is a single-pass type II membrane protein localized to the nodes of Ranvier and is specifically expressed in spinal cord, brain, placenta and sciatic nerve. It is more abundant in peripheral than central nervous system.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Gldn (mouse) mapping to 9 A5.3.

RESEARCH USE

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

SOURCE

Gliomedin (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Gliomedin of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68184 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Gliomedin (G-20) is recommended for detection of Gliomedin of mouse and rat 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).

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

Suitable for use as control antibody for Gliomedin siRNA (m): sc-62379, Gliomedin shRNA Plasmid (m): sc-62379-SH and Gliomedin shRNA (m) Lentiviral Particles: sc-62379-V.

Molecular Weight of Gliomedin isoforms: 59/46 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.

STORAGE

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

PROTOCOLS

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