SANTA CRUZ BIOTECHNOLOGY, INC.

AMIGO1 (V-16): sc-49880

The Power to Question

BACKGROUND

The amphoterin-induced gene and ORF (AMIGO) family of proteins consists of AMIGO1, AMIGO2 and AMIGO3. All three members are single pass type I membrane proteins that contain several leucine-rich repeats, one IgG domain and a transmembrane domain. The AMIGO proteins are specifically expressed on fiber tracts of neuronal tissues and participate in their formation. They can form complexes with each other, but can also self-bind. AMIGO1, also designated Alivin2, promotes growth and fasciculation of neurites and plays a role in myelination and fasciculation of developing neural axons. In cerebellar neurons, AMIGO2 (Alivin1) is crucial for depolarization-dependent survival. Similar to AMIGO1 and AMIGO2, AMIGO3 (Alivin3) plays a role in homophilic and/or heterophilic cell-cell interaction and signal transduction.

REFERENCES

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4. Ono, T., Sekino-Suzuki, N., Kikkawa, Y., Yonekawa, H. and Kawashima, S. 2003. Alivin 1, a novel neuronal activity-dependent gene, inhibits apoptosis and promotes survival of cerebellar granule neurons. J. Neurosci. 23: 5887-5896.
5. Chen, Y., Aulia, S., Li, L. and Tang, B.L. 2006. AMIGO and friends: an emerging type I transmembrane proteins with leucine-rich repeats (LRR) and cell adhesion molecule motifs. Brain Res. Rev. 51: 265-274.

CHROMOSOMAL LOCATION

Genetic locus: AMIGO1 (human) mapping to 1p13.3; Amigo1 (mouse) mapping to 3 F2.3.

SOURCE

AMIGO1 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AMIGO1 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.

Blocking peptide available for competition studies, sc-49880 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AMIGO1 (V-16) is recommended for detection of AMIGO1 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).

AMIGO1 (V-16) is also recommended for detection of AMIGO1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for AMIGO1 siRNA (h): sc-60162, AMIGO1 siRNA (m): sc-60163, AMIGO1 shRNA Plasmid (h): sc-60162-SH, AMIGO1 shRNA Plasmid (m): sc-60163-SH, AMIGO1 shRNA (h) Lentiviral Particles: sc-60162-V and AMIGO1 shRNA (m) Lentiviral Particles: sc-60163-V.

Molecular Weight of AMIGO1: 55 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

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.