SANTA CRUZ BIOTECHNOLOGY, INC.

AMIGO1 (S-18): sc-49879

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

1. Kuja-Panula, J., Kiiltomäki, M., Yamashiro, T., Rouhiainen, A. and Rauvala, H. 2003. AMIGO, a transmembrane protein implicated in axon tract development, defines a novel protein family with leucine-rich repeats. J. Cell Biol. 160: 963-973.
2. Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B., Dowd, P., Eaton, D., Foster, J., Grimaldi, C., Gu, Q., Hass, P.E., Heldens, S., Huang, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S., Lee, J., Lewis, L., Liao, D., et al. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Genome Res. 13: 2265-2270.
3. 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.
4. Kuja-Panula, J., Kiiltomäki, M., Yamashiro, T., Rouhiainen, A. and Rauvala, H. 2003. AMIGO, a transmembrane protein implicated in axon tract development, defines a novel protein family with leucine-rich repeats. J. Cell Biol. 160: 963-973.

CHROMOSOMAL LOCATION

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

SOURCE

AMIGO1 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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-49879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

AMIGO1 (S-18) 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), 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).

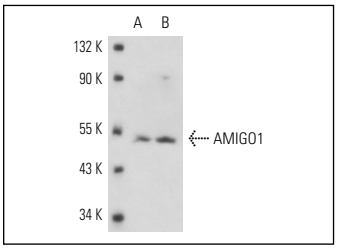
AMIGO1 (S-18) is also recommended for detection of AMIGO1 in additional species, including equine, canine, bovine and porcine.

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.

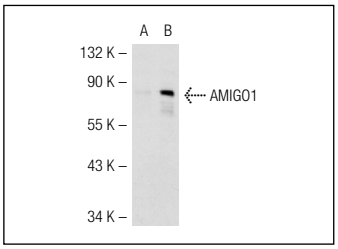
Molecular Weight of AMIGO1: 55 kDa.

Positive Controls: AMIGO1 (h): 293T Lysate: sc-115922, NIH/3T3 whole cell lysate: sc-2210 or T3 671 whole cell lysate.

DATA



AMIGO1 (S-18): sc-49879. Western blot analysis of AMIGO1 expression in NIH/3T3 (**A**) and T3 671 (**B**) whole cell lysates.



AMIGO1 (S-18): sc-49879. Western blot analysis of AMIGO1 expression in non-transfected: sc-117752 (**A**) and human AMIGO1 transfected: sc-115922 (**B**) 293T whole cell lysates.

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.