

AMIGO2 (C-15): sc-46760

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. AMIGO proteins can form complexes with each other, but can also bind themselves. AMIGO1, also designated Alivin 2, promotes growth and fasciculation of neurites and plays a role in myelination and fasciculation of developing neural axons. In cerebellar neurons, AMIGO2 (Alivin 1) is crucial for depolarization-dependent survival. Similar to AMIGO1 and AMIGO2, AMIGO3 (Alivin 3) plays a role in homophilic and/or heterophilic cell-cell interaction and signal transduction.

REFERENCES

1. Kuja-Panula, J., et al. 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., 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., et al. 2003. Alivin 1, a novel neuronal activity-dependent gene, inhibits apoptosis and promotes survival of cerebellar granule neurons. *J. Neurosci.* 23: 5887-5896.
4. Chen, Y., et al. 2006. AMIGO and friends: An emerging family of brain-enriched, neuronal growth modulating, type I transmembrane proteins with leucine-rich repeats (LRR) and cell adhesion molecule motifs. *Brain Res. Brain Res. Rev.* 51: 265-274.

CHROMOSOMAL LOCATION

Genetic locus: AMIGO2 (human) mapping to 12q13.11; Amigo2 (mouse) mapping to 15 F1.

SOURCE

AMIGO2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of AMIGO2 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-46760 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

AMIGO2 (C-15) is recommended for detection of AMIGO2 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).

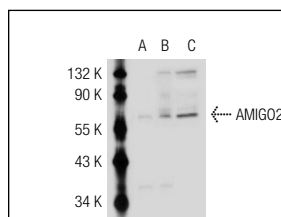
AMIGO2 (C-15) is also recommended for detection of AMIGO2 in additional species, including avian.

Suitable for use as control antibody for AMIGO2 siRNA (h): sc-60164, AMIGO2 siRNA (m): sc-60165, AMIGO2 shRNA Plasmid (h): sc-60164-SH, AMIGO2 shRNA Plasmid (m): sc-60165-SH, AMIGO2 shRNA (h) Lentiviral Particles: sc-60164-V and AMIGO2 shRNA (m) Lentiviral Particles: sc-60165-V.

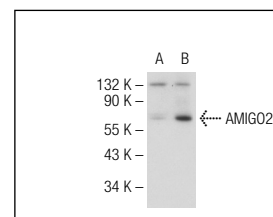
Molecular Weight of AMIGO2: 66 kDa.

Positive Controls: AMIGO2 (h): 293T Lysate: sc-111516, AMIGO2 (m): 293T Lysate: sc-118374 or Y79 cell lysate: sc-2240.

DATA



AMIGO2 (C-15): sc-46760. Western blot analysis of AMIGO2 expression in non-transfected 293T: sc-117752 (A), human AMIGO2 transfected 293T: sc-111516 (B) and Y79 (C) whole cell lysates.



AMIGO2 (C-15): sc-46760. Western blot analysis of AMIGO2 expression in non-transfected: sc-117752 (A) and mouse AMIGO2 transfected: sc-118374 (B) 293T whole cell lysates.

PROTOCOLS

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Try **AMIGO2 (G-7): sc-373699**, our highly recommended monoclonal alternative to AMIGO2 (C-15).