

AMIGO3 (H-90): sc-292657

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. The AMIGO proteins can form complexes with each other, but can also bind itself. 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 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: AMIGO3 (human) mapping to 3p21.31; Amigo3 (mouse) mapping to 9 F2.

SOURCE

AMIGO3 (H-90) is a rabbit polyclonal antibody raised against amino acids 291-380 mapping within an internal region of AMIGO3 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.

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.

APPLICATIONS

AMIGO3 (H-90) is recommended for detection of AMIGO3 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).

AMIGO3 (H-90) is also recommended for detection of AMIGO3 in additional species, including canine.

Suitable for use as control antibody for AMIGO3 siRNA (h): sc-60166, AMIGO3 siRNA (m): sc-60167, AMIGO3 shRNA Plasmid (h): sc-60166-SH, AMIGO3 shRNA Plasmid (m): sc-60167-SH, AMIGO3 shRNA (h) Lentiviral Particles: sc-60166-V and AMIGO3 shRNA (m) Lentiviral Particles: sc-60167-V.

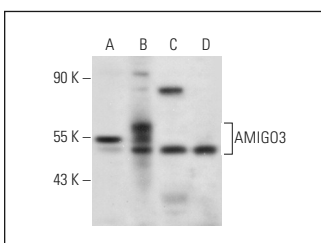
Molecular Weight of AMIGO3: 55 kDa.

Positive Controls: AMIGO3 (h): 293T Lysate: sc-112480, MCF7 whole cell lysate: sc-2206 or MDA-MB-435S whole cell lysate: sc-364184.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



AMIGO3 (H-90): sc-292657. Western blot analysis of AMIGO3 expression in non-transfected 293T: sc-117752 (A), human AMIGO3 transfected 293T: sc-112480 (B), MCF7 (C) and MDA-MB-435S (D) whole cell lysates.

RESEARCH USE

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