

AMIGO3 (h): 293T Lysate: sc-112480

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., 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, AL., 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, PE., Heldens, S., 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. 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: AMIGO3 (human) mapping to 3p21.31.

PRODUCT

AMIGO3 (h): 293T Lysate represents a lysate of human AMIGO3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

AMIGO3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive AMIGO3 antibodies. Recommended use: 10-20 µl per lane.

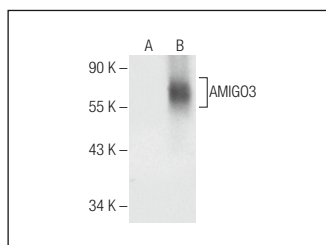
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

AMIGO3 (C-8): sc-377209 is recommended as a positive control antibody for Western Blot analysis of enhanced human AMIGO3 expression in AMIGO3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



AMIGO3 (C-8): sc-377209. Western blot analysis of AMIGO3 expression in non-transfected: sc-117752 (A) and human AMIGO3 transfected: sc-112480 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.