

AMIGO1 Antibody
Catalog # ASC11725**Specification**

AMIGO1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q86WK6
Other Accession	NP_065754 , 153791466
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 54 kDa

Application Notes	Observed: 55 kDa KDa AMIGO1 antibody can be used for detection of AMIGO1 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
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AMIGO1 Antibody - Additional InformationGene ID **57463****Target/Specificity**

AMIGO1; AMIGO1 antibody is human, mouse, and rat reactive. AMIGO1 antibody is predicted to not cross-react with AMIGO2 or AMIGO3.

Reconstitution & Storage

AMIGO1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

AMIGO1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AMIGO1 Antibody - Protein InformationName AMIGO1 ([HGNC:20824](#))**Function**

Promotes growth and fasciculation of neurites from cultured hippocampal neurons. May be involved in fasciculation as well as myelination of developing neural axons. May have a role in regeneration as well as neural plasticity in the adult nervous system. May mediate homophilic as well as heterophilic cell-cell interaction and contribute to signal transduction through its intracellular domain. Assembled with KCNB1 modulates the gating characteristics of the delayed rectifier voltage-dependent potassium channel KCNB1.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q80ZD8}; Single-pass type I membrane protein

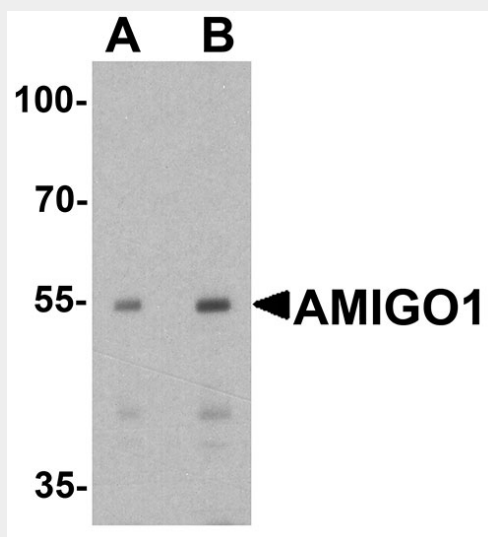
{ECO:0000250|UniProtKB:Q80ZD8} Perikaryon {ECO:0000250|UniProtKB:Q80ZD8}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q80ZD8}. Cell projection, axon {ECO:0000250|UniProtKB:Q80ZD7}. Note=Colocalizes with KCNB1 at high- density somatodendritic clusters on the surface of hippocampal and cortical neurons. Associated with axons of neuronal cells {ECO:0000250|UniProtKB:Q80ZD7, ECO:0000250|UniProtKB:Q80ZD8}

AMIGO1 Antibody - Protocols

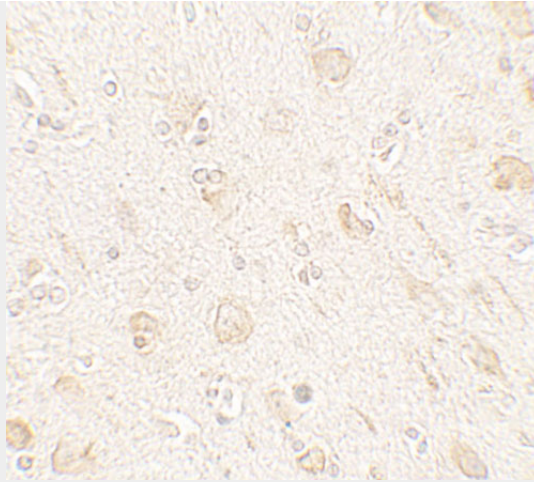
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

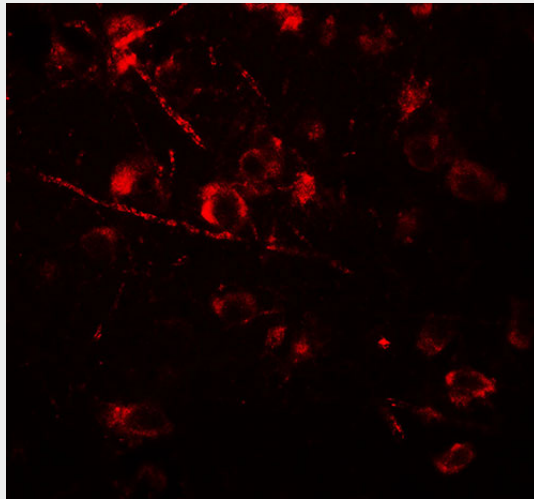
AMIGO1 Antibody - Images



Western blot analysis of AMIGO1 in HeLa cell lysate with AMIGO1 antibody at (A) 1 and (B) 2 μ g/ml.



Immunohistochemistry of AMIGO1 in human brain tissue with AMIGO1 antibody at 5 µg/mL.



Immunofluorescence of AMIGO1 in human brain tissue with AMIGO1 antibody at 20 µg/mL.

AMIGO1 Antibody - Background

The amphotericin-induced gene and ORF (AMIGO1) protein is a brain-enriched, glycosylated transmembrane immunoglobulin (Ig) superfamily protein with six extracellular leucine-rich repeats (LRRs) and one Ig-like domain. It and the related proteins AMIGO2 and AMIGO3 are thought to be cell adhesion molecules expressed on fiber tracts of neuronal tissues and participate in their formation (1). AMIGO1 has also been suggested to play important roles in dendritic outgrowth during development and could modulate the survival of developing and adult neurons (2).

AMIGO1 Antibody - References

Kuja-Panula J, Kiiltomaki M, Yamashiro T, et al. AMIGO, a transmembrane protein implicated in axon tract development, defines a novel protein family with leucine-rich repeats. *J. Cell Biol.* 2003; 160:963-73.
Chen Y, Hor HH, and Tang BL. AMIGO is expressed in multiple brain cell types and may regulate dendritic growth and neuronal survival. *J. Cell Physiol.* 2012; 227:2217-29.