

# Astrotactin (N-15): sc-51033

## BACKGROUND

Neuronal migration of the central nervous system is a specialized form of cell motility that takes place in the laminar structure of the cortical regions of brain. Astrotactin is a neuronal cell surface protein that is expressed on postmitotic neuronal precursors in the cerebellum, hippocampus, cerebrum and olfactory bulb. It mediates neuron-astroglial interactions and is also implicated in synaptic development as well as many other neuronal activities. Astrotactin has three epidermal growth factor repeat domains and two Fibronectin type III repeat domains. The human Astrotactin gene maps to 1q25.2 and shows extensive homology to the mouse Astrotactin gene. Mutations in the Astrotactin gene are linked to neuronal migration defects in both species.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ASTN1 (human) mapping to 1q25.2; Astn1 (mouse) mapping to 1 H1.

## SOURCE

Astrotactin (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Astrotactin 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-51033 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Astrotactin (N-15) is recommended for detection of Astrotactin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Astrotactin (N-15) is also recommended for detection of Astrotactin in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for ARAP2 siRNA (h): sc-60198, ARAP2 siRNA (m): sc-60199, ARAP2 shRNA Plasmid (h): sc-60198-SH, ARAP2 shRNA Plasmid (m): sc-60199-SH, ARAP2 shRNA (h) Lentiviral Particles: sc-60198-V and ARAP2 shRNA (m) Lentiviral Particles: sc-60199-V.

Molecular Weight of Astrotactin: 145 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Astrotactin (H-9): sc-514299**, our highly recommended monoclonal alternative to Astrotactin (N-15).