

Astrotactin 2 (K-17): sc-54863

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 expressed on postmitotic neuronal precursors in the cerebellum, hippocampus, cerebrum and olfactory bulb. Astrotactin 2 is a paralog of Astrotactin. Astrotactin 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 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: ASTN2 (human) mapping to 9q33.1; ASTR2 (mouse) mapping to 4 C1.

RESEARCH USE

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

SOURCE

Astrotactin 2 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Astrotactin 2 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-54863 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Astrotactin 2 (K-17) is recommended for detection of Astrotactin 2 of mouse 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 2 (K-17) is also recommended for detection of Astrotactin 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Astrotactin 2 siRNA (h): sc-62000, Astrotactin 2 siRNA (m): sc-62001, Astrotactin 2 shRNA Plasmid (h): sc-62000-SH, Astrotactin 2 shRNA Plasmid (m): sc-62001-SH, Astrotactin 2 shRNA (h) Lentiviral Particles: sc-62000-V and Astrotactin 2 shRNA (m) Lentiviral Particles: sc-62001-V.

Molecular Weight of Astrotactin 2: 148 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.