



UNC-5 (cN-12): sc-23214

BACKGROUND

The nervous system of *Caenorhabditis elegans* comprises circumferential and longitudinal axon tracts. Netrin UNC-6 is required for the guidance of circumferential axon migrations and is expressed by ventral neuroglia and neurons in temporally and spatially regulated patterns. Migrating axons mediate the UNC-6 signal through the UNC-5 and UNC-40 receptors. UNC-6 is a member of the netrin family of guidance proteins. Netrins are laminin-related proteins that guide circumferential migrations on the ectoderm.

REFERENCES

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2. Serafini, T., et al. 1994. The netrins define a family of axon outgrowth-promoting proteins homologous to *C. elegans* UNC-6. *Cell* 78: 409-424.
3. Wadsworth, W.G., et al. 1996. Neuroglia and pioneer neurons express UNC-6 to provide global and local netrin cues for guiding migrations in *C. elegans*. *Neuron* 16: 35-46.
4. Lim, Y.S., et al. 1999. Netrin UNC-6 and the regulation of branching and extension of motoneuron axons from the ventral nerve cord of *Caenorhabditis elegans*. *J. Neurosci.* 19: 7048-7056.
5. Kim, S., et al. 1999. SDQR migrations in *Caenorhabditis elegans* are controlled by multiple guidance cues and changing responses to netrin UNC-6. *Development* 126: 3881-3890.
6. Ren, X.C., et al. 1999. Role of netrin UNC-6 in patterning the longitudinal nerves of *Caenorhabditis elegans*. *J. Neurobiol.* 39: 107-118.
7. Wadsworth, W.G. 2002. Moving around in a worm: netrin UNC-6 and circumferential axon guidance in *C. elegans*. *Trends Neurosci.* 25: 423-429.
8. Wang, Q., et al. 2002. The C domain of netrin UNC-6 silences calcium/calmodulin-dependent protein kinase- and diacylglycerol-dependent axon branching in *Caenorhabditis elegans*. *J. Neurosci.* 22: 2274-2282.

SOURCE

UNC-5 (cN-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UNC-5 of *Caenorhabditis elegans* 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-23214 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

UNC-5 (cN-12) is recommended for detection of the short and long forms of UNC-5 of *Caenorhabditis elegans* 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).

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.

PROTOCOLS

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