# Artn (C-18): sc-9330



The Power to Questio

#### **BACKGROUND**

Neurotrophic factors are soluble proteins that are involved in the development and maintenance of the peripheral and central nervous systems. Glial cell line-derived neurotrophic factor (GDNF), neurturin (NTN) and persephin (PSP) are members of a family of neurotrophic factors that is distantly related to the TGF $\beta$  superfamily. PSP, like GDNF and NTN, promotes survival and inhibits degeneration of dopaminergic neurons. Unlike GDNF and NTN, however, PSP does not appear to support peripheral neurons. An additional member of the GDNF ligand family, artemin (Artn), interacts preferentially with the GFR $\alpha$ -3-Ret receptor complex, but it can also interact with the GFR $\alpha$ -1-Ret receptor complex, which is the preferred receptor of GDNF. Artn is also capable of supporting peripheral and central neurons.

# **CHROMOSOMAL LOCATION**

Genetic locus: ARTN (human) mapping to 1p34.1; Artn (mouse) mapping to 4 D2.1.

## **SOURCE**

Artn (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Artn of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9330 P, (100  $\mu$ g 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**

Artn (C-18) is recommended for detection of all forms of Artn 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).

Artn (C-18) is also recommended for detection of all forms of Artn in additional species, including bovine and porcine.

Suitable for use as control antibody for Artn siRNA (h): sc-41966, Artn siRNA (m): sc-41967, Artn shRNA Plasmid (h): sc-41966-SH, Artn shRNA Plasmid (m): sc-41967-SH, Artn shRNA (h) Lentiviral Particles: sc-41966-V and Artn shRNA (m) Lentiviral Particles: sc-41967-V.

Molecular Weight of Artn: 27 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.

## **SELECT PRODUCT CITATIONS**

- Lucini, C., et al. 2004. Artemin-like immunoreactivity in the zebrafish, Danio rerio. Anat. Embryol. 208: 403-410.
- Ito, Y., et al. 2005. Expression of glial cell line-derived neurotrophic factor family members and their receptors in pancreatic cancers. Surgery 138: 788-794.
- 3. Lucini, C., et al. 2007. Glial cell line-derived neurotrophic factor expression in the retina of adult zebrafish (*Danio rerio*). Neurosci. Lett. 429: 156-160.
- Quartu, M., et al. 2007. Tissue distribution of neurturin, persephin and artemin in the human brainstem at fetal, neonatal and adult age. Brain Res. 1143: 102-115.
- Maruccio, L., et al. 2008. The development of avian enteric nervous system: distribution of artemin immunoreactivity. Acta Histochem. 110: 163-171
- 6. Lucini, C., et al. 2008. Cellular localization of GDNF and its  $GFR\alpha 1/RET$  receptor complex in the developing pancreas of cat. J. Anat. 213: 565-572.

## **PROTOCOLS**

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



Try **Artn (BQ-74X):** sc-73715, our highly recommended monoclonal alternative to Artn (C-18).

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