SANTA CRUZ BIOTECHNOLOGY, INC.

plexin-C1 (N-17): sc-10149

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Plexins are a family of large, transmembrane receptors for multiple classes of semaphorins in vertebrates. Plexins are widely expressed, and regions of their extracellular domain are homologus to both scatter factor receptors and semaphorin domains. Plexins may act as semaphorin receptors alone or in combination with neuropilins. Plexins are divided into four subfamilies designated plexin-A, -B, -C, and -D. *Drosophila* plexin A is a receptor for class I semaphorins and controls motor and axon guidance. Plexin A3 mediates cell-repelling cues. Plexins B and C are receptors for Sema 4 and Sema 7, respectively.

CHROMOSOMAL LOCATION

Genetic locus: PLXNC1 (human) mapping to 12q22; Plxnc1 (mouse) mapping to 10 C2.

SOURCE

plexin-C1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of plexin-C1 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-10149 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

plexin-C1 (N-17) is recommended for detection of plexin-C1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

plexin-C1 (N-17) is also recommended for detection of plexin-C1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for plexin-C1 siRNA (h): sc-44026, plexin-C1 siRNA (m): sc-42179, plexin-C1 shRNA Plasmid (h): sc-44026-SH, plexin-C1 shRNA Plasmid (m): sc-42179-SH, plexin-C1 shRNA (h) Lentiviral Particles: sc-44026-V and plexin-C1 shRNA (m) Lentiviral Particles: sc-42179-V.

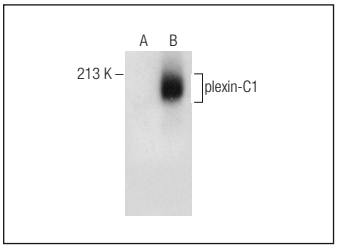
Molecular Weight of plexin-C1: 176 kDa.

Positive Controls: plexin-C1 (h2): 293T Lysate: sc-372114.

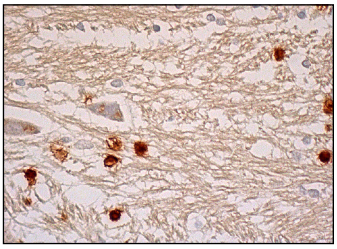
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



plexin-C1 (N-17): sc-10149. Western blot analysis of plexin-C1 expression in non-transfected: sc-117752 (**A**) and human plexin-C1 transfected: sc-372114 (**B**) 293T whole cell lysates.



plexin-C1 (N-17): sc-10149. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lateral ventricle tissue showing cytoplasmic and nuclear staining of glial cells.

SELECT PRODUCT CITATIONS

1. LeBouder, E., et al. 2003. Soluble forms of toll-like receptor (TLR)2 capable of modulating TLR2 signaling are present in human plasma and breast milk. J. Immunol. 171: 6680-6689.
2. Basso, K., et al. 2004. Gene expression profiling of hairy cell leukemia reveals a phenotype related to memory B cells with altered expression of chemokine and adhesion receptors. J. Exp. Med. 199: 59-68.
3. Goldberg, J.L., et al. 2004. An oligodendrocyte lineage-specific semaphorin, Sema5A, inhibits axon growth by retinal ganglion cells. J. Neurosci. 24: 4989-4999.
4. Messina, A., et al. 2011. Dysregulation of Semaphorin7A/β1-integrin signaling leads to defective GnRH-1 cell migration, abnormal gonadal development and altered fertility. Hum. Mol. Genet. 20: 4759-4774.