

# plexin-C1 (B-8): sc-390216

## 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 homologous 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.

## REFERENCES

1. Kolodkin, A.L., et al. 1993. The semaphorin genes encode a family of transmembrane and secreted growth cone guidance molecules. *Cell* 75: 1389-1399.
2. Kameyama, T., et al. 1996. Identification of plexin family molecules in mice. *Biochem. Biophys. Res. Commun.* 226: 396-402.
3. Tamagnone, L., et al. 1997. Control of invasive growth by hepatocyte growth factor (HGF) and related scatter factors. *Cytokine Growth Factor Rev.* 8: 129-142.
4. Winberg, M.L., et al. 1998. Plexin A is a neuronal semaphorin receptor that controls axon guidance. *Cell* 95: 903-916.
5. Artigiani, S., et al. 1999. Plexins, semaphorins, and scatter factor receptors: a common root for cell guidance signals? *IUBMB Life* 48: 477-478.
6. Takahashi, T., et al. 1999. Plexin-neuropilin-1 complexes form functional semaphorin-3A receptors. *Cell* 99: 59-69.
7. Tamagnone, L., et al. 1999. Plexins are a large family of receptors for transmembrane, secreted, and GPI-anchored semaphorins in vertebrates. *Cell* 99: 71-80.

## CHROMOSOMAL LOCATION

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

## SOURCE

plexin-C1 (B-8) is a mouse monoclonal antibody raised against amino acids 4-300 mapping near the N-terminus of plexin-C1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

plexin-C1 (B-8) is available conjugated to agarose (sc-390216 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390216 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390216 PE), fluorescein (sc-390216 FITC), Alexa Fluor® 488 (sc-390216 AF488), Alexa Fluor® 546 (sc-390216 AF546), Alexa Fluor® 594 (sc-390216 AF594) or Alexa Fluor® 647 (sc-390216 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390216 AF680) or Alexa Fluor® 790 (sc-390216 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

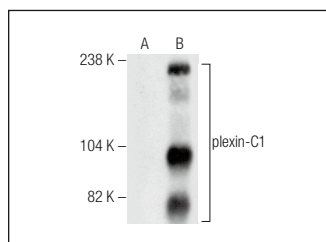
plexin-C1 (B-8) is recommended for detection of plexin-C1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

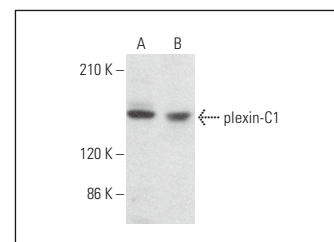
Molecular Weight of plexin-C1: 176 kDa.

Positive Controls: plexin-C1 (h2): 293T Lysate: sc-372114, c4 whole cell lysate: sc-364186 or C6 whole cell lysate: sc-364373.

## DATA



plexin-C1 (B-8): sc-390216. 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 (B-8): sc-390216. Western blot analysis of plexin-C1 expression in c4 (A) and C6 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Meng, N., et al. 2023. PLXNC1 interference alleviates the inflammatory injury, apoptosis and extracellular matrix degradation of IL-1β-exposed chondrocytes via suppressing GRP78 expression. *J. Orthop. Surg. Res.* 18: 784.
2. Bernard, A., et al. 2024. plexin-C1 influences immune response to intracellular LPS and survival in murine sepsis. *J. Biomed. Sci.* 31: 82.

## 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) for detailed protocols and support products.

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