SANTA CRUZ BIOTECHNOLOGY, INC.

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

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.

REFERENCES

1. Artigiani, S., Comoglio, P.M. and Tamagnone, L. 1992. Plexins, semaphorins, and scatter factor receptors: a common root for cell guidance signals? IUBMB Life 48: 477-478.
2. Kolodkin, A.L., Matthes, D.J. and Goodman, C.S. 1993. The semaphorin genes encode a family of transmembrane and secreted growth cone guidance molecules. Cell 75: 1389-1399.
3. Kameyama, T., Murakami, Y., Suto, F., Kawakami, A., Takagi, S., Hirata, T. and Fujisawa, H. 1996. Identification of plexin family molecules in mice. Biochem. Biophys. Res. Commun. 226: 396-402.
4. Tamagnone, L. and Comoglio, P.M. 1997. Control of invasive growth by hepatocyte growth factor (HGF) and related scatter factors. Cytokine Growth Factor Rev. 8: 129-142.
5. Winberg, M.L., Noordermeer, J.N., Tamagnone, L., Comoglio, P.M., Spriggs, M.K., Tessier-Lavigne, M. and Goodman, C.S. 1998. Plexin A is a neuronal semaphorin receptor that controls axon guidance. Cell 95: 903-916.
6. Takahashi, T., Fournier, A., Nakamura, F., Wang, L.H., Murakami, Y., Kalb, R.G., Fujisawa, H. and Strittmatter, S.M. 1999. Plexin-neuropilin-1 complexes form functional semaphorin-3A receptors. Cell 99: 59-69.
7. Tamagnone, L., Artigiani, S., Chen, H., He, Z., Ming, G.I., Song, H., Chedotal, A., Winberg, M.L., Goodman, C.S., Poo, M., Tessier-Lavigne, M. and Comoglio, P.M. 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.

PRODUCT

plexin-C1 (h2): 293T Lysate represents a lysate of human plexin-C1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

plexin-C1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive plexin-C1 antibodies. Recommended use: 10-20 µl per lane.

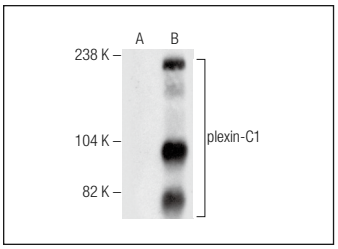
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

plexin-C1 (B-8): sc-390216 is recommended as a positive control antibody for Western Blot analysis of enhanced human plexin-C1 expression in plexin-C1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

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.

PROTOCOLS

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