

# plexin-B2 (H-90): sc-67034

## BACKGROUND

Plexins are a family of large, transmembrane receptors for multiple classes of semaphorins in vertebrates. They 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. Plexin-B1 and -B2 are both receptors for SEMA4D, which stimulates axonal outgrowth of embryonic dorsal root ganglion neurons. Plexin-B3 binds to SEMA5A, which controls axon guidance and can initiate the intracellular signaling of the hepatocyte growth factor/scatter factor receptor Met.

## CHROMOSOMAL LOCATION

Genetic locus: PLXNB2 (human) mapping to 22q13.33; Plxnb2 (mouse) mapping to 15 E3.

## SOURCE

plexin-B2 (H-90) is a rabbit polyclonal antibody raised against amino acids 1051-1140 mapping within an extracellular domain of plexin-B2 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.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

plexin-B2 (H-90) is recommended for detection of plexin-B2 precursor and mature 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-B2 (H-90) is also recommended for detection of plexin-B2 precursor and mature in additional species, including equine, canine and bovine.

Suitable for use as control antibody for plexin-B2 siRNA (h): sc-45422, plexin-B2 siRNA (m): sc-45423, plexin-B2 shRNA Plasmid (h): sc-45422-SH, plexin-B2 shRNA Plasmid (m): sc-45423-SH, plexin-B2 shRNA (h) Lentiviral Particles: sc-45422-V and plexin-B2 shRNA (m) Lentiviral Particles: sc-45423-V.

Molecular Weight of plexin-B2 precursor: 240 kDa.

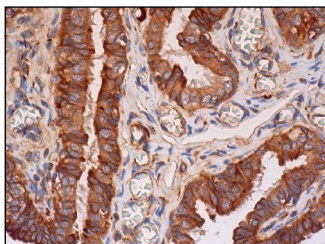
Molecular Weight of plexin-B2 extracellular  $\alpha$  subunit: 170 kDa.

Molecular Weight of plexin-B2 transmembrane  $\beta$  subunit: 80 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



plexin-B2 (H-90): sc-67034. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing membrane and cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Mayer, U., et al. 2009. The proteome of rat olfactory sensory cilia. *Proteomics* 9: 322-334.

## 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) or our catalog for detailed protocols and support products.

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Try **plexin-B2 (A-5): sc-373969** or **plexin-B2 (H-12): sc-373930**, our highly recommended monoclonal alternatives to plexin-B2 (H-90).