

# plexin-A2 (H-70): sc-25640

## 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 SEMA4 and SEMA7, respectively.

## CHROMOSOMAL LOCATION

Genetic locus: PLXNA2 (human) mapping to 1q32.2; Plxn2 (mouse) mapping to 1 H6.

## SOURCE

plexin-A2 (H-70) is a rabbit polyclonal antibody raised against amino acids 531-600 of plexin-A2 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.

## RESEARCH USE

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

## APPLICATIONS

plexin-A2 (H-70) is recommended for detection of plexin-A2 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-A2 (H-70) is also recommended for detection of plexin-A2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for plexin-A2 siRNA (h): sc-42172, plexin-A2 siRNA (m): sc-42173, plexin-A2 shRNA Plasmid (h): sc-42172-SH, plexin-A2 shRNA Plasmid (m): sc-42173-SH, plexin-A2 shRNA (h) Lenti-viral Particles: sc-42172-V and plexin-A2 shRNA (m) Lentiviral Particles: sc-42173-V.

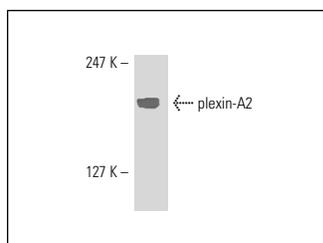
Molecular Weight of plexin-A2: 200/220 kDa.

Positive Controls: mouse brain extract: sc-2253.

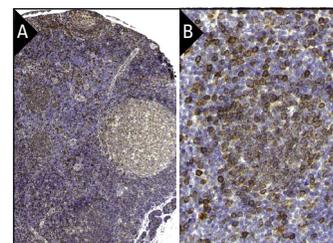
## RECOMMENDED SECONDARY REAGENTS

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-A2 (H-70): sc-25640. Western blot analysis of plexin-A2 expression in mouse brain tissue extract.



plexin-A2 (H-70): sc-25640. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lymph node tissue showing membrane staining of follicle and non-follicle cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## SELECT PRODUCT CITATIONS

1. Renaud, J., et al. 2008. Plexin-A2 and its ligand, SEMA6A, control nucleus-centrosome coupling in migrating granule cells. *Nat. Neurosci.* 11: 440-449.

## 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-A2 (A-2): sc-393939** or **plexin-A2 (E-1): sc-166082**, our highly recommended monoclonal alternatives to plexin-A2 (H-70).