

EphB4 (N-19): sc-7285

BACKGROUND

The Eph subfamily represents the largest group of receptor protein tyrosine kinases identified to date. While the biological activities of these receptors have yet to be determined, there is increasing evidence that they are involved in central nervous system function and in development. The Eph subfamily receptors of human origin (and their murine/avian homologs) include EphA1 (Eph), EphA2 (Eck), EphA3 (Hek4), EphA4 (Hek8), EphA5 (Hek7), EphA6 (Hek12), EphA7 (Hek11/MDK1), EphA8 (Hek3), EphB1 (Hek6), EphB2 (Hek5), EphB3 (Cek10, Hek2), EphB4 (Htk), EphB5 (Hek9) and EphB6 (Mep). Ligands for Eph receptors include ephrin-A4 (LERK-4) which binds EphA3 and EphB1. ephrin-A2 (ELF-1) has been described as the ligand for EphA4, ephrin-A3 (Ehk1-L) as the ligand for EphA5 and ephrin-B2 (Htk-L) as the ligand for EphB4 (Htk).

REFERENCES

1. Beckmann, M.P., et al. 1994. Molecular characterization of a family of ligands for eph-related tyrosine kinase receptors. *EMBO J.* 13: 3757-3762.
2. Cheng, H.J., et al. 1994. Identification and cloning of ELF-1, a developmentally expressed ligand for the Mek4 and Sek receptor tyrosine kinases. *Cell* 79: 157-168.
3. Ciossek, T., et al. 1995. Identification of alternatively spliced mRNAs encoding variants of MDK1, a novel receptor tyrosine kinase expressed in the murine nervous system. *Oncogene* 10: 97-108.
4. Kozlosky, C.J., et al. 1995. Ligands for the receptor tyrosine kinases hek and elk: isolation of cDNAs encoding a family of proteins. *Oncogene* 10: 299-306.
5. Fox, G.M., et al. 1995. DNA cloning and tissue distribution of five human EPH-like receptor protein-tyrosine kinases. *Oncogene* 10: 897-905.

CHROMOSOMAL LOCATION

Genetic locus: EPHB4 (human) mapping to 7q22.1; Ephb4 (mouse) mapping to 5 G2.

SOURCE

EphB4 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of EphB4 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-7285 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

EphB4 (N-19) is recommended for detection of EphB4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

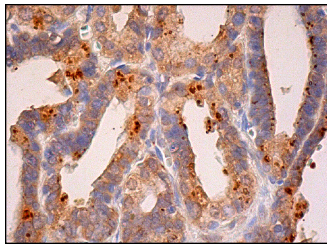
EphB4 (N-19) is also recommended for detection of EphB4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EphB4 siRNA (h): sc-39953, EphB4 siRNA (m): sc-39954, EphB4 shRNA Plasmid (h): sc-39953-SH, EphB4 shRNA Plasmid (m): sc-39954-SH, EphB4 shRNA (h) Lentiviral Particles: sc-39953-V and EphB4 shRNA (m) Lentiviral Particles: sc-39954-V.

Molecular Weight of EphB4: 120 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, PC-3 cell lysate: sc-2220 or AN3 CA cell lysate: sc-24662.

DATA



EphB4 (N-19): sc-7285. Immunoperoxidase staining of formalin fixed, paraffin-embedded human seminal vesicle tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Yuan, K., et al. 2004. Syndecan-1 up-regulated by ephrin-B2/EphB4 plays dual roles in inflammatory angiogenesis. *Blood* 104: 1025-1033.
2. Colín-Castelán, D., et al. 2011. EphB4 is developmentally and differentially regulated in blood vessels throughout the forebrain neurogenic niche in the mouse brain: Implications for vascular remodeling. *Brain Res.* 1383: 90-98.

PROTOCOLS

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


 MONOS
Satisfation
Guaranteed

Try **EphB4 (H-10): sc-365510** or **EphB4 (5G2F8): sc-130081**, our highly recommended monoclonal alternatives to EphB4 (N-19).