

EphB1 (M-19): sc-9319

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.

CHROMOSOMAL LOCATION

Genetic locus: EPHB1 (human) mapping to 3q22.2; Ephb1 (mouse) mapping to 9 F1.

SOURCE

EphB1 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EphB1 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-9319 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EphB1 (M-19) is recommended for detection of EphB1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EphB1 (M-19) is also recommended for detection of EphB1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EphB1 siRNA (h): sc-39947, EphB1 siRNA (m): sc-39948, EphB1 shRNA Plasmid (h): sc-39947-SH, EphB1 shRNA Plasmid (m): sc-39948-SH, EphB1 shRNA (h) Lentiviral Particles: sc-39947-V and EphB1 shRNA (m) Lentiviral Particles: sc-39948-V.

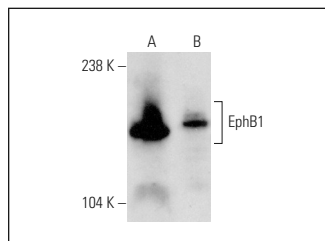
Molecular Weight of EphB1: 130 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, ACHN whole cell lysate: sc-364365 or mouse brain extract: sc-2253.

STORAGE

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

DATA



EphB1 (M-19): sc-9319. Western blot analysis of EphB1 expression in IMR-32 (A) and ACHN (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nagashima, K., et al. 2002. Adaptor protein Crk is required for ephrin-B1-induced membrane ruffling and focal complex assembly of human aortic endothelial cells. *Mol. Biol. Cell* 13: 4231-4242.
2. Wang, Y., et al. 2002. Negative regulation of EphA2 receptor by Cbl. *Biochem. Biophys. Res. Commun.* 296: 214-220.
3. Rissoan, M.C., et al. 2002. Subtractive hybridization reveals the expression of immunoglobulin-like transcript 7, EphB1, granzyme B, and 3 novel transcripts in human plasmacytoid dendritic cells. *Blood* 100: 3295-3303.
4. Egawa, M., et al. 2003. Ephrin B1 is expressed on human luteinizing granulosa cells in corpora lutea of the early luteal phase: the possible involvement of the B class Eph-ephrin system during corpus luteum formation. *J. Clin. Endocrinol. Metab.* 88: 4384-4392.
5. Vidovic, M. and Marotte, L.R. 2003. Analysis of EphB receptors and their ligands in the developing retinocollicular system of the wallaby reveals dynamic patterns of expression in the retina. *Eur. J. Neurosci.* 18: 1549-1558.
6. Renné, C., et al. 2005. Autocrine- and paracrine-activated receptor tyrosine kinases in classic Hodgkin lymphoma. *Blood* 105: 1051-4059.
7. Shimizu, E., et al. 2012. Alendronate affects osteoblast functions by crosstalk through EphrinB1-EphB. *J. Dent. Res.* 91: 268-274.

RESEARCH USE

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


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Try **EphB1 (5F10A4): sc-130054**, our highly recommended monoclonal alternative to EphB1 (M-19).