

ephrin-A5 (C-19): sc-6075

BACKGROUND

The Eph subfamily represents the largest group of receptor protein kinases identified to date. There is increasing evidence that they are involved in central nervous system function and in development. Ligands for Eph receptors include ephrin-A1 (LERK-1/B61), identified as a ligand for the EphA2 (Eck) receptor; ephrin-A2 (ELF-1), identified as a ligand for the EphA3 and EphA4 (Sek) receptors; ephrin-A3 (LERK-3), identified as a ligand for EphA5 (Ehk1) and EphA3 (Hek) receptors; ephrin-A4 (LERK-4), identified as a ligand for the EphA3 receptor; ephrin-A5 (AL-1), identified as a ligand for EphA5 (REK7); ephrin-B1 (LERK-2), identified as a ligand for the EphB1 (Elk) and EphB2 (Cek5) receptors; ephrin-B2 (LERK-5), identified as a ligand for the EphB1, EphB3 (Cek10) and EphB2 receptors; and ephrin-B3 (LERK-8), identified as a ligand for EphB1.

REFERENCES

1. 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.
2. Beckmann, M.P., et al. 1994. Molecular characterization of a family of ligands for eph-related tyrosine kinase receptors. *EMBO J.* 13: 3757-3762.
3. Bartley, T.D., et al. 1994. B61 is a ligand for the ECK receptor protein-tyrosine kinase. *Nature* 368: 558-560.
4. Bergemann, A.D., et al. 1995. ELF-2, a new member of the Eph ligand family, is segmentally expressed in mouse embryos in the region of the hindbrain and newly forming somites. *Mol. Cell. Biol.* 15: 4921-4929.
5. Winslow, J.W., et al. 1995. Cloning of AL-1, a ligand for an Eph-related tyrosine kinase receptor involved in axon bundle formation. *Neuron* 14: 973-981.
6. 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.
7. Gale, N.W., et al. 1996. Elk-LE, a novel transmembrane ligand for the Eph family of receptor tyrosine kinases, expressed in embryonic floor plate, roof plate and hindbrain segments. *Oncogene* 13: 1343-1352.

CHROMOSOMAL LOCATION

Genetic locus: EFNA5 (human) mapping to 5q21.3; Efna5 (mouse) mapping to 17 E1.1.

SOURCE

ephrin-A5 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ephrin-A5 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-6075 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ephrin-A5 (C-19) is recommended for detection of ephrin-A5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ephrin-A5 (C-19) is also recommended for detection of ephrin-A5 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ephrin-A5 siRNA (h): sc-39434, ephrin-A5 siRNA (m): sc-39435, ephrin-A5 shRNA Plasmid (h): sc-39434-SH, ephrin-A5 shRNA Plasmid (m): sc-39435-SH, ephrin-A5 shRNA (h) Lentiviral Particles: sc-39434-V and ephrin-A5 shRNA (m) Lentiviral Particles: sc-39435-V.

Molecular Weight of ephrin-A5: 26 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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.

SELECT PRODUCT CITATIONS

1. Kojima, T., et al. 2007. Comparison of EphA receptor tyrosine kinases and ephrinA ligand expression to EphB-ephrinB in vascularized corneas. *Cornea* 26: 569-578.
2. Deschamps, C., et al. 2010. EphrinA5 protein distribution in the developing mouse brain. *BMC Neurosci.* 11: 105.

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.

PROTOCOLS

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



Try **ephrin-A5 (RR-7): sc-81945**, our highly recommended monoclonal alternative to ephrin-A5 (C-19).