

ephrin-A2 (L-20): sc-912

BACKGROUND

The Eph subfamily represents the largest group of receptor protein kinases identified to date. There is increasing evidence that Eph family members 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. Bartley, T.D., et al. 1994. B61 is a ligand for the ECK receptor protein- tyrosine kinase. *Nature* 368: 558-560.
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. 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: EFNA2 (human) mapping to 19p13.3; Efna2 (mouse) mapping to 10 C1.

SOURCE

ephrin-A2 (L-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ephrin-A2 of mouse 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-912 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ephrin-A2 (L-20) is recommended for detection of ephrin-A2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence and 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).

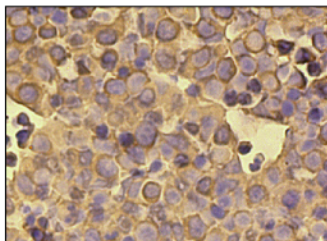
Suitable for use as control antibody for ephrin-A2 siRNA (h): sc-39428, ephrin-A2 siRNA (m): sc-39429, ephrin-A2 shRNA Plasmid (h): sc-39428-SH, ephrin-A2 shRNA Plasmid (m): sc-39429-SH, ephrin-A2 shRNA (h) Lentiviral Particles: sc-39428-V and ephrin-A2 shRNA (m) Lentiviral Particles: sc-39429-V.

Positive Controls: mouse embryo extract.

STORAGE

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

DATA



ephrin-A2 (L-20): sc-912. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse embryo tissue showing membrane cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Bianchi, L.M. and Gale, N.W. 1998. Distribution of Eph-related molecules in the developing and mature cochlea. *Hearing Research* 117: 161-172.
2. Davenport, R., et al. 1998. Cellular localization of ephrin-A2, ephrin-A5, and other functional cues underlies retinotopic development across species. *J. Neurosci.* 18: 975-986.
3. Hattori, M., et al. 2000. Regulated cleavage of a contact-mediated axon repellent. *Science* 289: 1360-1365.
4. Symonds, A., et al. 2001. Reinnervation of the superior colliculus delays downregulation of ephrin-A2 in neonatal rat. *Exp. Neurol.* 170: 364-370.
5. Rodger, J., et al. 2001. Expression of ephrin-A2 in the superior colliculus and EphA5 in the retina following optic nerve section in adult rat. *Eur. J. Neurosci.* 14: 1929-1936.
6. Brantley, D.M., et al. 2002. Soluble Eph A receptors inhibit tumor angiogenesis and progression *in vivo*. *Oncogene.* 21: 7011-7026.
7. King, C.E., et al. 2003. Transient upregulation of retinal EphA3 and EphA5, but not ephrin-A2, coincides with re-establishment of a topographic map during optic nerve regeneration in goldfish. *Exp. Neurol.* 183: 593-599.
8. Nie, D., et al. 2010. Tsc2-Rheb signaling regulates EphA-mediated axon guidance. *Nat. Neurosci.* 13: 163-172.

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.