## SANTA CRUZ BIOTECHNOLOGY, INC.

# ephrin-A1 (H-60): sc-20719



#### 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 EphA5 (REK7); ephrin-B1 (LERK-2), 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

- Bartley, T.D., et al. 1994. B61 is a ligand for the ECK receptor protein-tyrosine kinase. Nature 368: 558-560.
- Beckmann, M.P., et al. 1994. Molecular characterization of a family of ligands for eph-related tyrosine kinase receptors. EMBO J. 13: 3757-3762.
- 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.
- 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.
- 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.

#### CHROMOSOMAL LOCATION

Genetic locus: EFNA1 (human) mapping to 1q22; Efna1 (mouse) mapping to 3 F1.

#### SOURCE

ephrin-A1 (H-60) is a rabbit polyclonal antibody raised against amino acids 146-205 mapping at the C-terminus of ephrin-A1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*D0 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

ephrin-A1 (H-60) is recommended for detection of ephrin-A1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

ephrin-A1 (H-60) is also recommended for detection of ephrin-A1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ephrin-A1 siRNA (h): sc-39426, ephrin-A1 siRNA (m): sc-39427, ephrin-A1 shRNA Plasmid (h): sc-39426-SH, ephrin-A1 shRNA Plasmid (m): sc-39427-SH, ephrin-A1 shRNA (h) Lentiviral Particles: sc-39426-V and ephrin-A1 shRNA (m) Lentiviral Particles: sc-39427-V.

Molecular Weight of ephrin-A1 isoform 1: 24 kDa.

Molecular Weight of ephrin-A1 isoform 2: 21 kDa.

Positive Controls: THP-1 cell lysate: sc-2238 or ephrin-A1 (h): 293T Lysate: sc-111528.

#### DATA





ephrin-A1 (H-60): sc-20719. Western blot analysis of ephrin-A1 expression in non-transfected: sc-117752 (**A**) and human ephrin-A1 transfected: sc-111528 (**B**) 293T whole cell lysates.

ephrin-A1 (H-60): sc-20719. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

#### SELECT PRODUCT CITATIONS

- Zhang, W., et al. 2010. A potential tumor suppressor role for Hic1 in breast cancer through transcriptional repression of ephrin-A1. Oncogene 29: 2467-2476.
- Arocho, L.C., et al. 2011. Expression profile and role of EphrinA1 ligand after spinal cord injury. Cell. Mol. Neurobiol. 31: 1057-1069.

# MONOS Satisfation Guaranteed

Try ephrin-A1 (A-5): sc-377362 or ephrin-A1 (B-12): sc-377165, our highly recommended monoclonal aternatives to ephrin-A1 (H-60).