# SANTA CRUZ BIOTECHNOLOGY, INC.

# ephrin-B3 (H-170): sc-20724



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 EphA5 (REK7); ephrin-B1 (LERK-2), identified as a ligand for the EphA5 (REK7); ephrin-B1 (LERK-2), identified as a ligand for the EphB1 (Elk) and EphB2 (Cek5) receptors; 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 proteintyrosine 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.
- 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.
- 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.
- 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.
- 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: EFNB3 (human) mapping to 17p13.1; Efnb3 (mouse) mapping to 11 B3.

#### SOURCE

ephrin-B3 (H-170) is a rabbit polyclonal antibody raised against amino acids 141-310 mapping near the C-terminus of ephrin-B3 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.

#### **RESEARCH USE**

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

# APPLICATIONS

ephrin-B3 (H-170) is recommended for detection of ephrin-B3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

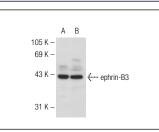
ephrin-B3 (H-170) is also recommended for detection of ephrin-B3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ephrin-B3 siRNA (h): sc-39440, ephrin-B3 siRNA (m): sc-39441, ephrin-B3 shRNA Plasmid (h): sc-39440-SH, ephrin-B3 shRNA Plasmid (m): sc-39441-SH, ephrin-B3 shRNA (h) Lentiviral Particles: sc-39440-V and ephrin-B3 shRNA (m) Lentiviral Particles: sc-39441-V.

Molecular Weight of ephrin-B3: 40-43 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411 or Caki-1 cell lysate: sc-2224.

# DATA



ephrin-B3 (H-170): sc-20724. Western blot analysis of ephrin-B3 expression in U-87 MG (A) and Caki-1 (B) whole cell lysates

# SELECT PRODUCT CITATIONS

 Zhang, Q.H., et al. 2005. Profiling of differentially expressed genes in LRRC4 overexpressed glioblastoma cells by cDNA array. Acta Biochim. Biophys. Sin. 37: 680-687.

# **STORAGE**

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

# PROTOCOLS

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

MONOS Satisfation Guaranteed

Try ephrin-B3 (D-11): sc-390696 or ephrin-B3 (A-7): sc-271328, our highly recommended monoclonal aternatives to ephrin-B3 (H-170).