SANTA CRUZ BIOTECHNOLOGY, INC.

# ephrin-B3 (N-19): sc-7281

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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.
4. 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.
5. 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.
6. 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.


## CHROMOSOMAL LOCATION

Genetic locus: EFNB3 (human) mapping to 17p13.1; Efnb3 (mouse) mapping to 11 B3.

## SOURCE

ephrin-B3 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ephrin-B3 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-7281 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

ephrin-B3 (N-19) 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 µg per 100-500 µg 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).

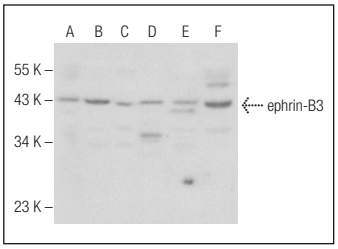
ephrin-B3 (N-19) is also recommended for detection of ephrin-B3 in additional species, including equine, canine, bovine and porcine.

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: Caki-1 cell lysate: sc-2224, U-87 MG cell lysate: sc-2411 or A-431 whole cell lysate: sc-2201.

## DATA




ephrin-B3 (N-19): sc-7281. Western blot analysis of ephrin-B3 expression in U-87 MG (**A**), Caki-1 (**B**), SK-OV-3 (**C**), U-937 (**D**), A-431 (**E**) and U-251 MG (**F**) whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Bianchi, L.M., et al. 2002. Lac z Histochemistry and immunohistochemistry reveal ephrin-B ligand expression in the inner ear. J. Histochem. Cytochem. 50: 1641-1645.
2. Bianchi, L.M., et al. 2002. EphB receptors influence growth of ephrin-B1-positive statoacoustic nerve fibers. Eur. J. Neurosci. 16: 1499-1506.


## RESEARCH USE

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