SANTA CRUZ BIOTECHNOLOGY, INC.

# ephrin-A3 (12EXZ): sc-73954

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 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. 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 MEK-4 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.
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: EFNA3 (human) mapping to 1q22.

## SOURCE

ephrin-A3 (12EXZ) is a mouse monoclonal antibody raised against the extracellular domain of ephrin-A3 of human origin.

## PRODUCT

Each vial contains 100 µg $IgG_{2a}$ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

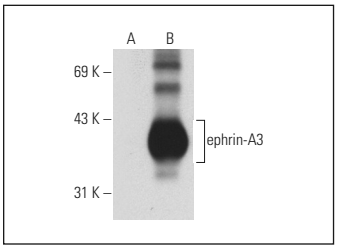
ephrin-A3 (12EXZ) is recommended for detection of ephrin-A3 extracellular domain of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for ephrin-A3 siRNA (h): sc-39430, ephrin-A3 shRNA Plasmid (h): sc-39430-SH and ephrin-A3 shRNA (h) Lentiviral Particles: sc-39430-V.

Molecular Weight of ephrin-A3: 32-38 kDa.

Positive Controls: ephrin-A3 (h4): 293T Lysate: sc-110072.

## DATA




ephrin-A3 (12EXZ): sc-73954. Western blot analysis of ephrin-A3 expression in non-transfected: sc-117752 (**A**) and human ephrin-A3 transfected: sc-110072 (**B**) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Chang, S., et al. 2008. T-bet dependent removal of Sin3A-histone deacetylase complexes at the Ifng locus drives Th1 differentiation. J. Immunol. 181: 8372-8381.
2. Gómez-Maldonado, L., et al. 2014. EFNA3 long noncoding RNAs induced by hypoxia promote metastatic dissemination. Oncogene. E-published.


## RESEARCH USE

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

## PROTOCOLS

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