## SANTA CRUZ BIOTECHNOLOGY, INC.

# ephrin-B1/2/3 (C-18): sc-910



## BACKGROUND

Ephrins, which act as ligands for Eph receptors, are cell-surface proteins which fall into two categories, ephrin-A and ephrin-B, based on their structure and function. Ephrin-B proteins are transmembrane and have conserved cytoplasmic tyrosine residues that are phosphorylated upon interaction with an EphB receptor. Eph receptors and ephrins exhibit complementary expression in many tissues during embryogenesis indicating that bidirectional activation of Eph receptors and ephrin-B proteins may occur at expression domain interfaces. Ephrin-B1 transduces outside-in signals through C-terminal protein interactions that effect integrin-mediated cell attachment and migration. The distribution of ephrin-B1 in the developing retina suggests that it influences retinal axon mapping along the dorsal-ventral axis and may be involved in intratectal development The transmembrane ligand ephrin-B2 and its receptor tyrosine kinase EphB4 are specifically expressed on arterial and venous endothelial cells, respectively. Bidirectional signals mediated by both proteins play an important role in vascular development. Ephrin-B2 is essential for the normal morphogenesis of the embryonic vasculature and is angiogenic in tumors. It has been identified as an important target of chemotherapeutic treatments. Ephrin-B3 (LERK-8) has been identified as a ligand for EphB1.

## SOURCE

ephrin-B1/2/3 (C-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ephrin-B1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-910 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

ephrin-B1/2/3 (C-18) is recommended for detection of ephrin-B1, ephrin-B2 and ephrin-B3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ephrin-B1/2/3 (C-18) is also recommended for detection of ephrin-B1, ephrin-B2 and ephrin-B3 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of ephrin-B1/2/3: 45 kDa.

Positive Controls: ephrin-B1 (h): 293T Lysate: sc-176692, ephrin-B1 (m2): 293T Lysate: sc-120076 or mouse lung extract: sc-2390.

## **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.

#### DATA





ephrin-B1/2/3 (C-18): sc-910. Western blot analysis of ephrin-B1 expression in non-transfected: sc-117752 (**A**) and human ephrin-B1 transfected: sc-176692 (**B**) 293T whole cell lysates.

ephrin-B1 expression in non-transfected: sc-117752 (A) and mouse ephrin-B1 transfected: sc-120076 (B) 293T whole cell lysates.

#### SELECT PRODUCT CITATIONS

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- Ji, Y.J., et al. 2014. EphrinB2 affects apical constriction in *Xenopus* embryos and is regulated by ADAM10 and flotillin-1. Nat. Commun. 5: 3516.



Try **ephrin-B1 (C-6): sc-515264**, our highly recommended monoclonal aternative to ephrin-B1/2/3 (C-18).