SANTA CRUZ BIOTECHNOLOGY, INC.

ephrin-B2 (P-20): sc-1010

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. 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.

CHROMOSOMAL LOCATION

Genetic locus: EFNB2 (human) mapping to 13q33.3; Efnb2 (mouse) mapping to 8 A1.1.

SOURCE

ephrin-B2 (P-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of ephrin-B2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1010 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ephrin-B2 (P-20) is recommended for detection of ephrin-B2 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-B2 (P-20) is also recommended for detection of ephrin-B2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ephrin-B2 siRNA (h): sc-39438, ephrin-B2 siRNA (m): sc-39439, ephrin-B2 shRNA Plasmid (h): sc-39438-SH, ephrin-B2 shRNA Plasmid (m): sc-39439-SH, ephrin-B2 shRNA (h) Lentiviral Particles: sc-39438-V and ephrin-B2 shRNA (m) Lentiviral Particles: sc-39439-V.

Molecular Weight of ephrin-B2: 37 kDa.

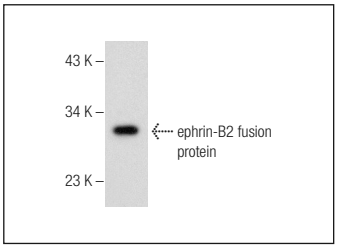
STORAGE

Store at 4° C, **DO 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-B2 (P-20): sc-1010. Western blot analysis of human recombinant ephrin-B2 fusion protein.

SELECT PRODUCT CITATIONS

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