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Product Information

Anti-Ephrin-B2
produced in goat, affinity isolated antibody

Catalog Number **E7525**

Product Description

Anti-Ephrin-B2 is produced in goat using as immunogen purified recombinant mouse ephrin-B2, expressed in mouse NSO cells. The antibody is purified using mouse ephrin-B2 affinity chromatography.

Anti-Ephrin-B2 recognizes recombinant mouse ephrin-B2 in ELISA and immunoblotting. By ELISA and immunoblotting, the antibody shows ~50% cross-reactivity with recombinant human ephrin-A5 and 15% cross-reactivity with recombinant mouse ephrin-B1.

Eph receptor tyrosine kinases (RTK)[1] belong to a distinct class of RTKs that play important roles in many tissues. There are two classes of receptors, designated A and B. Both the A and B class receptors have an extracellular region consisting of a globular domain, a cysteine-rich domain, and two fibronectin type III domains. The transmembrane region and cytoplasmic region follow this. The cytoplasmic region contains a juxtamembrane motif with two tyrosine residues, which are the major autophosphorylation sites, a kinase domain, and a conserved sterile alpha motif (SAM) in the carboxy tail which contains one conserved tyrosine residue. Activation of kinase activity occurs after ligand recognition and binding. To date, at least 14 members of the Eph receptor family and a family of 8 ligands have been identified. Ligands of Eph family receptors are structurally related membrane-bound proteins that can be subdivided into two major subclasses,[2] ephrin-A and ephrin-B. Ligands in the ephrin-A subclass, including the prototype family member ephrin-A1 (B61), are membrane associated through glycosylphosphatidylinositol linkages, whereas ephrin-B subclass consists of ligands with transmembrane domains. The general role of the Eph family is in mediating repulsive cell-cell interaction, as suggested by studies of axonal guidance[3-6] and neural crest cell migration.[7-9]

Reagent

Supplied lyophilized from a 0.2 μm filtered solution of phosphate buffered saline, pH 7.4 with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 0.5 mL of 0.2 μm filtered PBS to produce a 0.2 mg/ml stock solution. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at −20 °C. Reconstituted product may be stored at 2-8 °C for at least one month. For prolonged storage, freeze in working aliquots at −20 °C. Avoid repeated freezing and thawing

Product Profile

Flow Cytometry: a working concentration of 0.25 µg/10^6 cells is recommended using the SH-SY5Y human neuroblastoma cell line.

Immunocytochemistry: a working dilution of 5-15 µg/mL using a sample of immersion fixed cultured rat embryonic hippocampal neurons.

Immunoblotting: a working concentration of 1 μg/mL is recommended using mouse ephrin-B2 at 25 ng/lane under non-reducing and reducing conditions.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilutions by titration test.

References

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