3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone (800) 325-5832 (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

ANTI-EPHRIN-B3, HUMAN,
Developed In Goat, Affinity Isolated Antibody

Product Number **E 7650**

Product Description

Anti-Ephrin-B3 is developed in goat using purified recombinant human ephrin-B3, expressed in mouse NSO cells, as immunogen. The antibody is purified using human ephrin-B3 affinity chromatography.

Anti-Ephrin-B3 recognizes recombinant human ephrin-B3 in ELISA and immunoblotting. By immunoblotting, the antibody shows approximately 50% cross-reactivity with recombinant human ephrin-A5.

Anti-Ephrin-B3 may be used for ELISA and immunoblotting.

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 a 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]

Reagents

Anti-Ephrin-B3 is supplied lyophilized from a 0.2 µm filtered solution of phosphate buffered saline. Endotoxin level is < 10 ng per mg antibody as determined by the LAL method.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of 0.2 µm filtered PBS to produce a 0.1 mg/ml stock solution of antibody. 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

For indirect ELISA, a working concentration of 0.5-1.0 µg/ml is determined to detect a limit of ~0.6 ng/well of recombinant human ephrin-B3.

For indirect immunoblotting, a working concentration of 0.1-0.2 µg/ml is determined using human ephrin-B3 at 25 ng/lane and 5 ng/lane under non-reducing and reducing conditions, respectively.

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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