

Product Information

ANTI-EPHB1 (ELK RECEPTOR)-EXT

Developed in Sheep, IgG Fraction of Antiserum

Product Number **E 5892**

Product Description

Anti-EphB1 (Elk Receptor)-EXT is developed in sheep using a highly purified fusion protein of GST and EphB1 (Elk Receptor)-EXT corresponding to amino acid residues 16-351 of human EphB1 as the immunogen. The IgG fraction was purified on immobilized protein A.

Anti-EphB1 (Elk Receptor)-EXT recognizes the external region of human EphB1 protein by immunoblotting and immunoprecipitation.

Eph receptor tyrosine kinases (RTK)¹ belong to a distinct class of RTKs that play important roles in many tissues. Members of this protein family are implicated in neuronal and vascular cell targeting. 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 trans-membrane 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 trans membrane domains. The a general role of the Eph family is in mediating repulsive cell-cell interaction, as suggested by studies of axonal guidance³⁻⁶ and neural crest cell migration.⁷⁻⁹ EphB1 is expressed predominately in developing neural structures in embryos, and in vascular epithelium of kidney, and other tissues.

Reagents

Anti-EphB1 (Elk Receptor)-EXT is supplied as 250 µg of purified IgG at a concentration of 1 mg/ml in phosphate buffered saline pH 7.2-7.4 with 0.08% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Antibodies should be stored at -20°C. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working concentration is 1-10 µg/ml for immunoblotting using peroxidase conjugated anti-sheep IgG and detection by ECL. The recommended working concentration is 10-20 µg/ml for immunoprecipitation.

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

References

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