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Anti-Eph Receptor B3 Antibody
Catalog # ABO10884

Specification

Anti-Eph Receptor B3 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P54753
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Ephrin type-B receptor 3(EPHB3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Eph Receptor B3 Antibody - Additional Information

Gene ID 2049

Other Names
Ephrin type-B receptor 3, 2.7.10.1, EPH-like tyrosine kinase 2, EPH-like kinase 2, Embryonic kinase 2, EK2, hEK2, Tyrosine-protein kinase TYRO6, EPHB3, ETK2, HEK2, TYRO6

Calculated MW
110330 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cell membrane ; Single-pass type I membrane protein . Cell projection, dendrite .

Tissue Specificity
Ubiquitous.

Protein Name
Ephrin type-B receptor 3

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Eph receptor B3(982-998aa SIQDMRLQMNQTLPVQV), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.

Anti-Eph Receptor B3 Antibody - Protein Information

Name EPHB3

Synonyms ETK2, HEK2, TYRO6

Function
Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. In addition to its role in axon guidance also plays an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, dendrite

Tissue Location
Ubiquitous.

Anti-Eph Receptor B3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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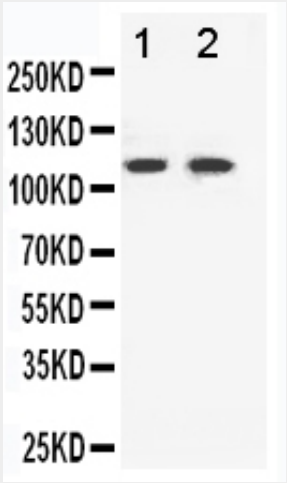
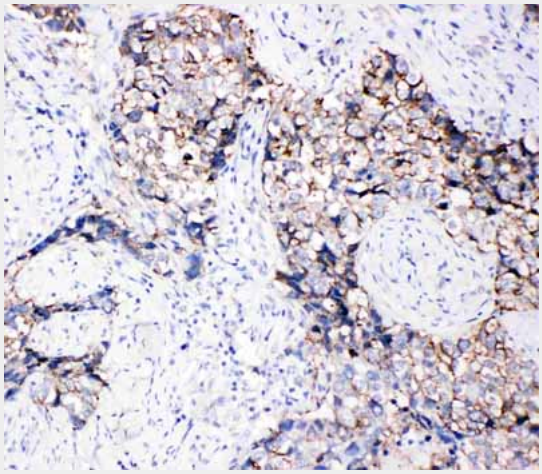
- Flow Cytomety
- Cell Culture

Anti-Eph Receptor B3 Antibody - Images



Anti-Eph receptor B3 antibody, ABO10884, Western blottingLane 1: HELA Cell LysateLane 2: A549 Cell Lysate



Anti-Eph receptor B3 antibody, ABO10884, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Eph Receptor B3 Antibody - Background

Ephrin Receptor EphB3, is also known as human embryo kinase2(HEK2) or Eph-like tyrosine kinase2(ETK2). HEK2, which is a member of the EPH/ELK family of tyrosine kinases, encodes a 998-amino acid polypeptide having a single putative transmembrane domain, a secretory signal sequence, and 2 fibronectin repeats. The EPHB3 gene is mapped to human chromosome 3q21-qter. HEK2 interacts with 2 ligands of EPH-related kinases(LERKs), namely, LERK2(EFNB1) and LERK5(EFNB2). Coincubation of HEK2- and LERK2-expressing cells induces cell-cell adhesion and aggregation. Additionally, coexpression of HEK2 and LERK2 results in reduced kinase activity of HEK2.