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Anti-Eph Receptor B1 Picoband Antibody

Catalog # ABO12270

Specification

Anti-Eph Receptor B1 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P54762
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Ephrin type-B receptor 1(EPHB1) detection. Tested with WB, IHC-P in Human.

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

Anti-Eph Receptor B1 Picoband Antibody - Additional Information

Gene ID 2047

Other Names
Ephrin type-B receptor 1, 2.7.10.1, ELK, EPH tyrosine kinase 2, EPH-like kinase 6, EK6, hEK6, Neuronally-expressed EPH-related tyrosine kinase, NET, Tyrosine-protein kinase receptor EPH-2, EPHB1, ELK, EPHT2, HEK6, NET

Calculated MW
109885 MW KDa

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

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

Tissue Specificity
Preferentially expressed in brain.

Protein Name
Ephrin type-B receptor 1

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

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human Eph receptor B1

(56-88aa RTYQVCNVFEPNQNNWLLTTFINRRGAHRIYTE), identical to the related mouse and rat 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 B1 Picoband Antibody - Protein Information

Name EPHB1

Synonyms ELK, EPHT2, HEK6, NET

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. Cognate/functional ephrin ligands for this receptor include EFNB1, EFNB2 and EFNB3. During nervous system development, regulates retinal axon guidance redirecting ipsilaterally ventrotemporal retinal ganglion cells axons at the optic chiasm midline. This probably requires repulsive interaction with EFNB2. In the adult nervous system together with EFNB3, regulates chemotaxis, proliferation and polarity of the hippocampus neural progenitors. 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 synapse formation. May also regulate angiogenesis. More generally, may play a role in targeted cell migration and adhesion. Upon activation by EFNB1 and probably other ephrin-B ligands activates the MAPK/ERK and the JNK signaling cascades to regulate cell migration and adhesion respectively. Involved in the maintenance of the pool of satellite cells (muscle stem cells) by promoting their self-renewal and reducing their activation and differentiation (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein Early endosome membrane. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8CBF3}

Tissue Location
Preferentially expressed in brain.

Anti-Eph Receptor B1 Picoband Antibody - Protocols

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

- Western Blot

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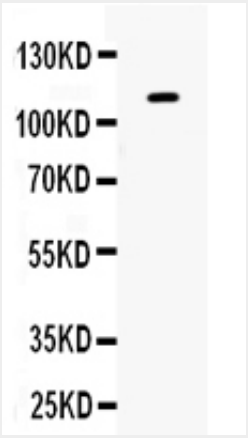
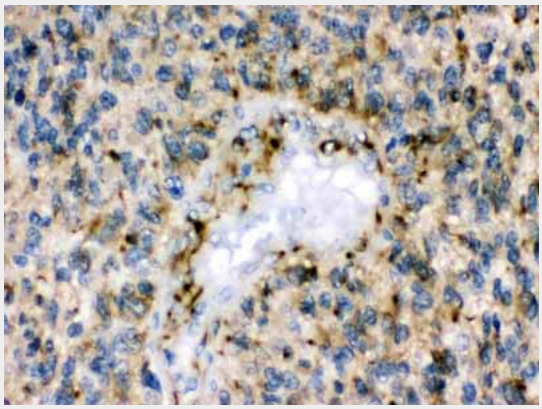
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Eph Receptor B1 Picoband Antibody - Images



Anti- Eph receptor B1 Picoband antibody, ABO12270, Western blottingAll lanes: Anti Eph receptor B1 (ABO12270) at 0.5ug/mlWB: 293T Whole Cell Lysate at 40ugPredicted bind size: 111KDObserved bind size: 111KD



Anti- Eph receptor B1 Picoband antibody, ABO12270, IHC(P)IHC(P): Human Glioma Tissue

Anti-Eph Receptor B1 Picoband Antibody - Background

Ephrin type-B receptor 1 is a protein that in humans is encoded by the EPHB1 gene. Ephrin receptors and their ligands, the ephrins, mediate numerous developmental processes, particularly in the nervous system. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. The Eph family of receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The protein encoded by this gene is a receptor for ephrin-B family members.