

**Anti-Eph Receptor B1 Picoband Antibody**  
**Catalog # ABO12270****Specification**

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**Anti-Eph Receptor B1 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P54762</a>
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.<br>

**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<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**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 reconstitution, 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.

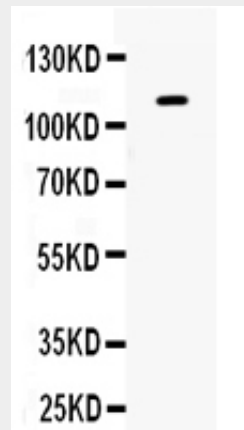
**Anti-Eph Receptor B1 Picoband Antibody - Protocols**

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

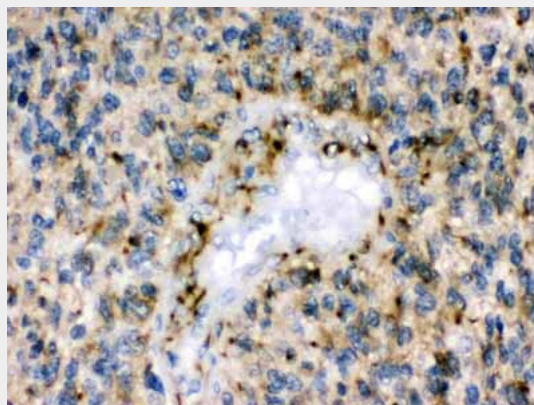
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Eph Receptor B1 Picoband Antibody - Images



Anti- Eph receptor B1 Picoband antibody, ABO12270, Western blotting All lanes: Anti Eph receptor B1 (ABO12270) at 0.5ug/ml WB: 293T Whole Cell Lysate at 40ug Predicted bind size: 111KD Observed 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.