

## **EphB1 Polyclonal Antibody**

**Catalog # AP69765** 

# **Specification**

## **EphB1 Polyclonal Antibody - Product Information**

Application WB
Primary Accession P54762

Reactivity Human, Mouse, Rat, Monkey

Host Rabbit Clonality Polyclonal

## **EphB1 Polyclonal Antibody - Additional Information**

**Gene ID 2047** 

### **Other Names**

EPHB1; ELK; EPHT2; HEK6; NET; Ephrin type-B receptor 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

#### **Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

#### **Storage Conditions**

-20°C

#### **EphB1 Polyclonal 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





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activation by EFNB1 and probably other ephrin-B ligands activates the MAPK/ERK and the INK 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**

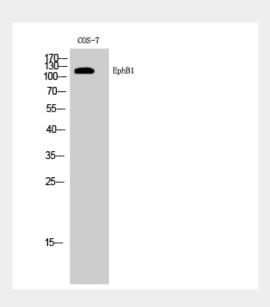
Preferentially expressed in brain.

# **EphB1 Polyclonal 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 Cytomety
- Cell Culture

# EphB1 Polyclonal Antibody - Images



EphB1 Polyclonal Antibody - Background

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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 plays also 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).