

Datasheet for ABIN3030823

anti-EPH Receptor B1 antibody (AA 374-409)

2 Images



Overview

| Overview | |
|-----------------------------|--|
| Quantity: | 0.4 mL |
| Target: | EPH Receptor B1 (EPHB1) |
| Binding Specificity: | AA 374-409 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This EPH Receptor B1 antibody is un-conjugated |
| Application: | Western Blotting (WB), ELISA |
| Product Details | |
| Immunogen: | A portion of amino acids 374-409 from the mouse protein were used as the immunogen for the |
| | Ephb1 antibody. |
| Isotype: | Ig Fraction |
| Cross-Reactivity (Details): | Expected species reactivity: Chicken |
| Purification: | Antigen affinity purified |
| Target Details | |
| Target: | EPH Receptor B1 (EPHB1) |
| Alternative Name: | Ephb1 (EPHB1 Products) |
| Background: | 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. Beside 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.

UniProt: Q8CBF3

Pathways: RTK Signaling

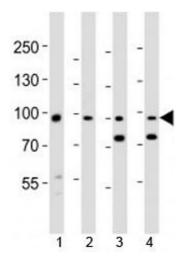
Application Details

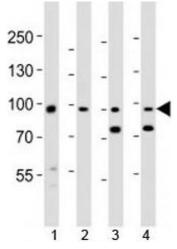
Application Notes: Titration of the Ephb1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000

Restrictions: For Research Use only

Handling

| Format: | Liquid |
|--------------------|--|
| Buffer: | In 1X PBS, pH 7.4, with 0.09 % sodium azide |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Aliquot the Ephb1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles. |





Western Blotting

Image 1. Western blot analysis of lysate from 1) human A431, 2) mouse NIH3T3 cell line, 3) mouse brain and 4) rat brain tissue lysate using Ephb1 antibody at 1:1000.

Western Blotting

Image 2. Western blot analysis of lysate from 1) human A431, 2) mouse NIH3T3 cell line, 3) mouse brain and 4) rat brain tissue lysate using Ephb1 antibody at 1:1000.