

EphA8 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1217a

Specification

EphA8 Antibody - Product Information

Application WB
Primary Accession P29322
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Description

EphA8: EPH receptor A8. This gene encodes a member of the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin 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. The protein encoded by this gene functions as a receptor for ephrin A2, A3 and A5 and plays a role in short-range contact-mediated axonal guidance during development of the mammalian nervous system.

Immunogen

Purified recombinant fragment of EphA8 (aa70-150) expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

EphA8 Antibody - Additional Information

Gene ID 2046

Other Names

Ephrin type-A receptor 8, 2.7.10.1, EPH- and ELK-related kinase, EPH-like kinase 3, EK3, hEK3, Tyrosine-protein kinase receptor EEK, EPHA8, EEK, HEK3, KIAA1459

Dilution

WB~~1/500 - 1/2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EphA8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EphA8 Antibody - Protein Information



Name EPHA8

Synonyms EEK, HEK3, KIAA1459

Function

Receptor tyrosine kinase which binds promiscuously GPI- anchored ephrin-A 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. The GPI-anchored ephrin-A EFNA2, EFNA3, and EFNA5 are able to activate EPHA8 through phosphorylation. With EFNA5 may regulate integrin-mediated cell adhesion and migration on fibronectin substrate but also neurite outgrowth. During development of the nervous system also plays a role in axon guidance. Downstream effectors of the EPHA8 signaling pathway include FYN which promotes cell adhesion upon activation by EPHA8 and the MAP kinases in the stimulation of neurite outgrowth (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:009127}; Single-pass type I membrane protein. Cell projection {ECO:0000250|UniProtKB:009127}. Early endosome membrane {ECO:0000250|UniProtKB:009127}. Note=Undergoes clathrin-mediated endocytosis upon EFNA5-binding and is targeted to early endosomes {ECO:0000250|UniProtKB:009127}

EphA8 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

EphA8 Antibody - Images

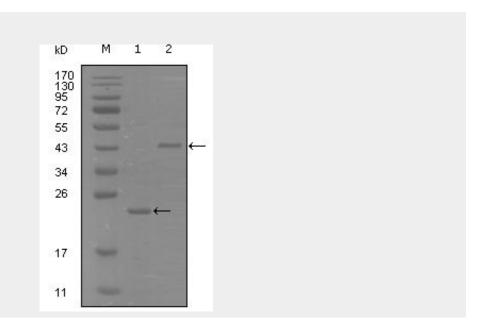








Figure 1: Western blot analysis using EphA8 mouse mAb against truncated Trx-EphA8 recombinant protein (1) and truncated MBP-EphA8(aa70-150) recombinant protein (2).

EphA8 Antibody - References

1. Curr Opin Neurobiol. 2004 Jun;14(3):288-96. 2. Oncogene. 2005 Jun 16;24(26):4243-56.