

EphA8 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1217a

Product Information

Application	WB, E
Primary Accession	P29322
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	9A12D8
Isotype	IgG1
Calculated MW	111003
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.

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 E~~N/A
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.

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:O09127}; Single-pass type I membrane protein. Cell projection {ECO:0000250 UniProtKB:O09127}. Early endosome membrane {ECO:0000250 UniProtKB:O09127}. Note=Undergoes clathrin-mediated endocytosis upon EFNA5-binding and is targeted to early endosomes {ECO:0000250 UniProtKB:O09127}

References

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

Images

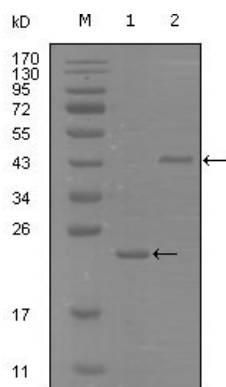


Figure 1: Western blot analysis using EphA8 mouse mAb against truncated Trx-EphA8 recombinant protein (1) and truncated MBP-EphA8(aa70-150) recombinant protein (2).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.