10320 Camino Santa Fe, Suite G
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EphA5 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1241a

Specification

EphA5 Antibody - Product Information

Application	**WB**
Primary Accession	P54756
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

Description
EphA5: EPH receptor A5. This gene belongs to 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.

Immunogen
Purified recombinant fragment of EphA5 (aa620-774) expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

EphA5 Antibody - Additional Information

Gene ID 2044

Other Names
Ephrin type-A receptor 5, 2.7.10.1, Brain-specific kinase, EPH homology kinase 1, EHK-1, EPH-like kinase 7, EK7, hEK7, EPHA5, BSK, EHK1, HEK7, TYRO4

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
EphA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EphA5 Antibody - Protein Information

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Name EPHA5

Synonyms BSK, EHK1, HEK7, TYRO4

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. Among GPI-anchored ephrin-A ligands, EFNA5 most probably constitutes the cognate/functional ligand for EPHA5. Functions as an axon guidance molecule during development and may be involved in the development of the retinotectal, entorhino- hippocampal and hippocamposeptal pathways. Together with EFNA5 plays also a role in synaptic plasticity in adult brain through regulation of synaptogenesis. In addition to its function in the nervous system, the interaction of EPHA5 with EFNA5 mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P54757}. Cell projection, dendrite

Tissue Location
Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus. Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord

EphA5 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

EphA5 Antibody - Images

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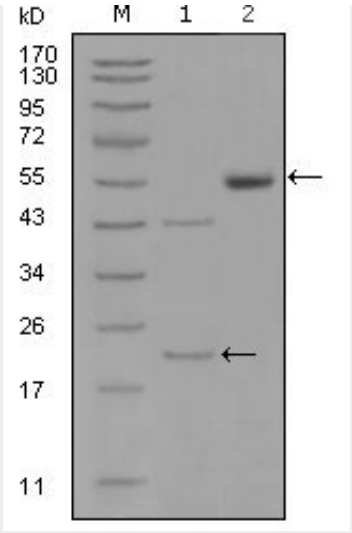

Figure 1: Western blot analysis using EPHA5 mouse mAb against truncated EPHA5-His recombinant protein (1) and truncated EPHA5(aa620-774)-hIgGFc transfected CHO-K1 cell lysate(2).

EphA5 Antibody - References

1. Nat Rev Neurosci. 2001 Mar;2(3):155-64. 2. BMC Cancer. 2006 Jun 1;6:144.