

**EphA5 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1241a****Specification**

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**EphA5 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P54756</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>

**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. <br />

**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**

**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 hippocamoseptal 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**

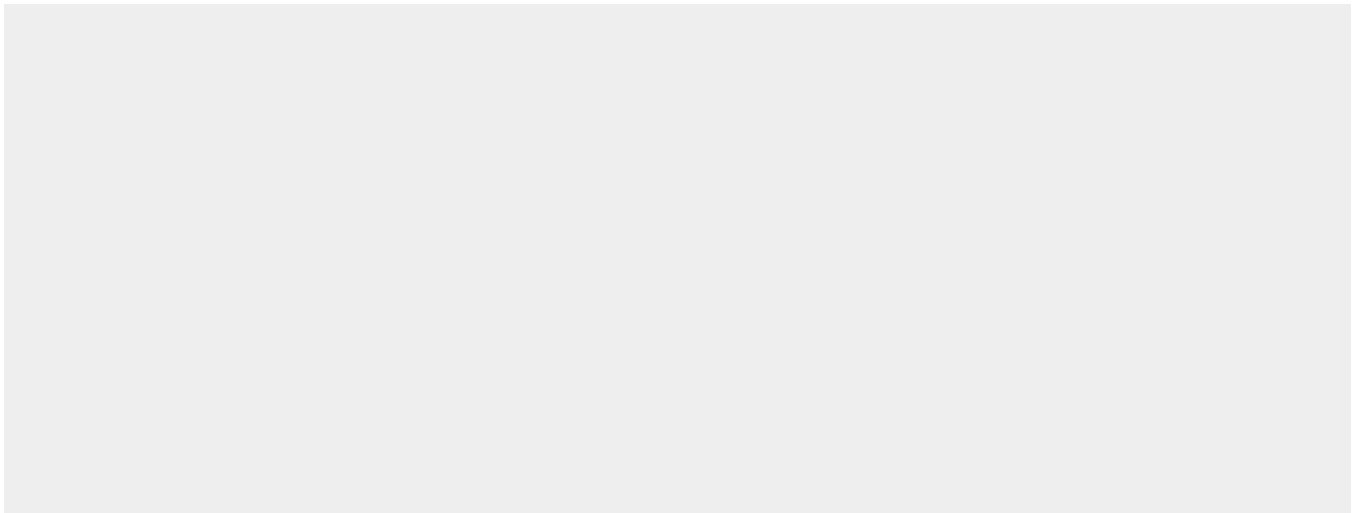
Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus. Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord

### **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 Cytometry](#)
- [Cell Culture](#)

### **EphA5 Antibody - Images**



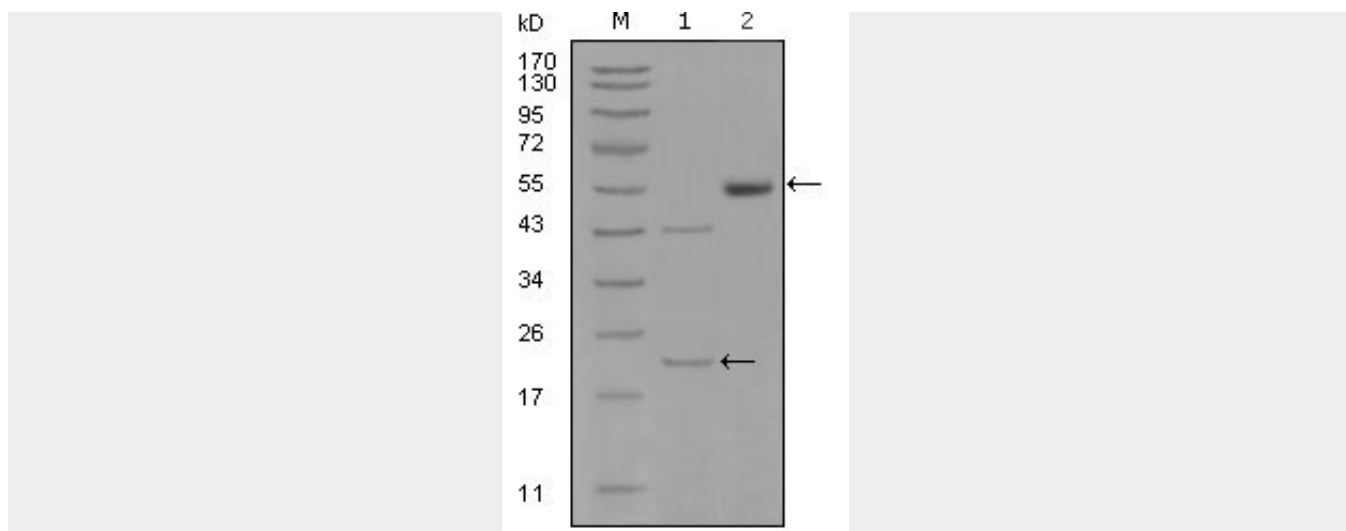


Figure 1: Western blot analysis using EPHA5 mouse mAb against truncated EPHA5-His recombinant protein (1) and truncated EPHA5(aa620-774)-hlgGfc transfected CHO-K1 cell lysate(2).

#### **Epha5 Antibody - References**

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