

EphA5 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7610a**Specification**

EphA5 Antibody (N-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	P54756
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	17-42

EphA5 Antibody (N-term) - Additional Information**Gene ID** 2044**Other Names**

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

Target/Specificity

This EphA5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 17-42 amino acids from the N-terminal region of human EphA5.

Dilution

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions

EphA5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EphA5 Antibody (N-term) - 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 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

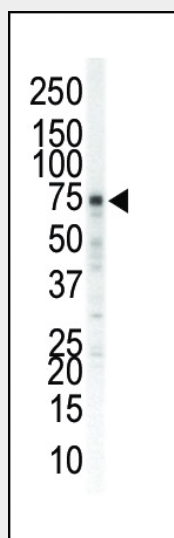
Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus. Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord

EphA5 Antibody (N-term) - Protocols

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

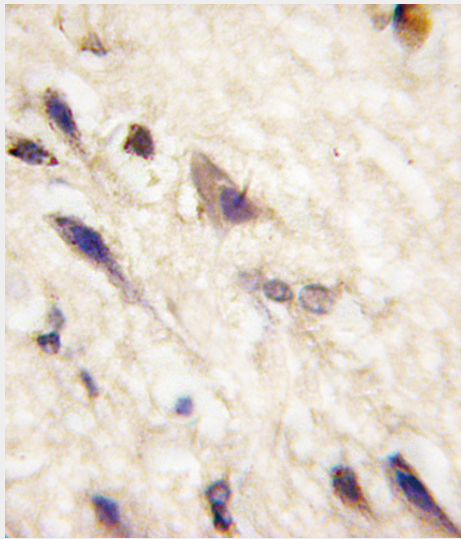
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EphA5 Antibody (N-term) - Images



Western blot analysis of anti-EphA5 N-term Pab (Cat. #AP7610a) in mouse brain tissue. EphA5

(arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Formalin-fixed and paraffin-embedded human brain tissue reacted with EphA5 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

EphA5 Antibody (N-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

EphA5 Antibody (N-term) - References

Pejovic, T. et al., Transl Oncol. Dec 01; 2(4): 341-9(2009).
Fox, G.M., et al., Oncogene 10(5):897-905 (1995).