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EphA5 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7610b

Specification

EphA5 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P54756
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**942-972**

EphA5 Antibody (C-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 942-972 amino acids from the C-terminal region of human EphA5.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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

EphA5 Antibody (C-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

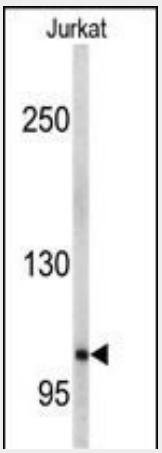
Tissue Location
Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus. Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord

EphA5 Antibody (C-term) - Protocols

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

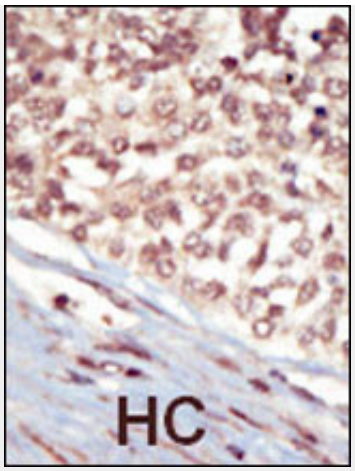
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EphA5 Antibody (C-term) - Images



Western blot analysis of anti-EphA5 Antibody (C-term) (Cat. #AP7610b) in Jurkat cell line lysates (35ug/lane). EPHA5(arrow) was detected using the purified Pab.

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Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

EphA5 Antibody (C-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g 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 (C-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).

EphA5 Antibody (C-term) - Citations

- Decreased expression of EphA5 is associated with Fuhrman nuclear grade and pathological tumour stage in ccRCC.