

EphA5 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7610a**Specification**

EphA5 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P54756](#)**EphA5 Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP7610a](/product/products/AP7610a) was selected from the N-term region of human EphA5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EphA5 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

EphA5 Antibody (N-term) Blocking Peptide - Images**EphA5 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - References

Fox, G.M., et al., Oncogene 10(5):897-905 (1995).