10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EphA8 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7613b

Specification

EphA8 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P29322

EphA8 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2046

Other Names
Ephrin type-A receptor 8, EPH- and ELK-related kinase, EPH-like kinase 3, EK3, hEK3, Tyrosine-protein kinase receptor EEK, EPHA8, EEK, HEK3, KIAA1459

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7613b was selected from the C-term region of human EphA8 . 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.

EphA8 Antibody (C-term) Blocking Peptide - Protein Information

Name EPHA8

Synonyms EEK, HEK3, KIAA1459

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. The GPI-anchored ephrin-A EFNA2, EFNA3, and EFNA5 are able to activate EPHA8 through phosphorylation. With EFNA5 may regulate integrin-mediated cell adhesion and migration on fibronectin substrate but also neurite outgrowth. During development of the nervous system also plays a role in axon guidance. Downstream effectors of the EPHA8 signaling pathway include FYN which promotes cell adhesion upon activation by EPHA8 and the MAP kinases in the stimulation of

neurite outgrowth (By similarity).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:O09127}; Single-pass type I membrane protein. Cell projection {ECO:0000250|UniProtKB:O09127}. Early endosome membrane {ECO:0000250|UniProtKB:O09127}. Note=Undergoes clathrin-mediated endocytosis upon EFNA5-binding and is targeted to early endosomes {ECO:0000250|UniProtKB:O09127}

EphA8 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

EphA8 Antibody (C-term) Blocking Peptide - Images

EphA8 Antibody (C-term) Blocking Peptide - 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).

EphA8 Antibody (C-term) Blocking Peptide - References

Wilkinson, D.G., Nat Rev Neurosci 2(3):155-164 (2001).Xu, Q., et al., Philos. Trans. R. Soc. Lond., B, Biol. Sci. 355(1399):993-1002 (2000).Holder, N., et al., Development 126(10):2033-2044 (1999).Choi, S., et al., Mol. Cells 9(4):440-445 (1999).Zhou, R., Pharmacol. Ther. 77(3):151-181 (1998).