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EphA1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7606a

Specification

EphA1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P21709

EphA1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2041

Other Names
Ephrin type-A receptor 1, hEpha1, EPH tyrosine kinase, EPH tyrosine kinase 1, Erythropoietin-producing hepatoma receptor, Tyrosine-protein kinase receptor EPH, EPHA1, EPH, EPHT, EPHT1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7606a was selected from the N-term region of human EphA1 . 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.

EphA1 Antibody (N-term) Blocking Peptide - Protein Information

Name EPHA1

Synonyms EPH, EPHT, EPHT1

Function
Receptor tyrosine kinase which binds promiscuously membrane- bound 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. Binds with a low affinity EFNA3 and EFNA4 and with a high affinity to EFNA1 which most probably constitutes its cognate/functional ligand. Upon activation by EFNA1 induces cell attachment to the extracellular matrix inhibiting cell spreading and motility through regulation of ILK and downstream RHOA and RAC. Also plays a role in angiogenesis and regulates cell proliferation. May

play a role in apoptosis.

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Overexpressed in several carcinomas.

EphA1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

EphA1 Antibody (N-term) Blocking Peptide - Images

EphA1 Antibody (N-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).

EphA1 Antibody (N-term) Blocking Peptide - References

Hillier, L.W., et al., Nature 424(6945):157-164 (2003).Owshalimpur, D., et al., Mol. Cell. Probes 13(3):169-173 (1999).Hirai, H., et al., Science 238(4834):1717-1720 (1987).