

Mouse Epha2 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP14619c

Specification

Mouse Epha2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q03145

Mouse Epha2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 13836

Other Names

Ephrin type-A receptor 2, Epithelial cell kinase, Tyrosine-protein kinase receptor ECK, Tyrosine-protein kinase receptor MPK-5, Tyrosine-protein kinase receptor SEK-2, Epha2, Eck, Myk2, Sek2

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.

Mouse Epha2 Antibody (Center) Blocking Peptide - Protein Information

Name Epha2

Synonyms Eck, Myk2, Sek2

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. Activated by the ligand ephrin- A1/EFNA1 regulates migration, integrin-mediated adhesion, proliferation and differentiation of cells (PubMed:29749928). Regulates cell adhesion and differentiation through DSG1/desmoglein-1 and inhibition of the ERK1/ERK2 signaling pathway. May also participate in UV radiation- induced apoptosis and have a ligand-independent stimulatory effect on chemotactic cell migration. During development, may function in distinctive aspects of pattern formation and subsequently in development of several fetal tissues. Involved for instance in angiogenesis, in early hindbrain development and epithelial proliferation and branching morphogenesis during mammary gland development. Engaged by the ligand ephrin-A5/EFNA5 may regulate lens fiber cells shape and interactions and be important for



lens transparency development and maintenance. With ephrin-A2/EFNA2 may play a role in bone remodeling through regulation of osteoclastogenesis and osteoblastogenesis.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P29317}; Single-pass type I membrane protein. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:P29317}; Single-pass type I membrane protein. Cell projection, lamellipodium membrane {ECO:0000250|UniProtKB:P29317}; Single-pass type I membrane protein. Cell junction, focal adhesion {ECO:0000250|UniProtKB:P29317}. Note=Present at regions of cell-cell contacts but also at the leading edge of migrating cells. Relocates from the plasma membrane to the cytoplasmic and perinuclear regions in cancer cells. {ECO:0000250|UniProtKB:P29317}

Tissue Location

Expressed in the lung, intestine and liver (PubMed:11287184). Expressed in myogenic progenitor cells (PubMed:27446912).

Mouse Epha2 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

Mouse Epha2 Antibody (Center) Blocking Peptide - Images

Mouse Epha2 Antibody (Center) Blocking Peptide - Background

Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A3, -A4 and -A5. Induces apoptosis in a TP53/p53-independent, caspase-8-dependent manner (By similarity). Plays an important role in angiogenesis and tumor neovascularization. The recruitement of VAV2, VAV3 and PI3-kinase p85 subunit by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly. May function in distinctive aspects of pattern formation and subsequently in development of several fetal tissues. May be involved in cell-cell interactions guiding early hindbrain development.

Mouse Epha2 Antibody (Center) Blocking Peptide - References

Islam, S., et al. Dig. Dis. Sci. 55(9):2478-2488(2010)Kim, J., et al. Mol. Cell. Biol. 30(7):1582-1592(2010)Zirzow, S., et al. Dev. Biol. 336(2):145-155(2009)Jun, G., et al. PLoS Genet. 5 (7), E1000584 (2009) :North, H.A., et al. Development 136(14):2467-2476(2009)