

Mouse Ephb4 Blocking Peptide (C-term) Synthetic peptide Catalog # BP20989c

### **Specification**

# Mouse Ephb4 Blocking Peptide (C-term) - Product Information

Primary Accession

<u>P54761</u>

# Mouse Ephb4 Blocking Peptide (C-term) - Additional Information

Gene ID 13846

**Other Names** 

Ephrin type-B receptor 4, Developmental kinase 2, mDK-2, Hepatoma transmembrane kinase, Tyrosine kinase MYK-1, Ephb4, Htk, Mdk2, Myk1

#### Target/Specificity

The synthetic peptide sequence is selected from aa 967-980 of HUMAN Ephb4

#### 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 Ephb4 Blocking Peptide (C-term) - Protein Information

Name Ephb4

Synonyms Htk, Mdk2, Myk1

#### Function

Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B 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. Together with its cognate ligand/functional ligand EFNB2 it is involved in the regulation of cell adhesion and migration, and plays a central role in heart morphogenesis, angiogenesis and blood vessel remodeling and permeability. EPHB4-mediated forward signaling controls cellular repulsion and segregation from EFNB2-expressing cells.

#### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P54760}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P54760}



**Tissue Location** 

Expressed in various organ systems, including lung, liver, kidney, intestine, muscle and heart (PubMed:7478528). Expressed in myogenic progenitor cells (PubMed:27446912)

# Mouse Ephb4 Blocking Peptide (C-term) - Protocols

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

- <u>Blocking Peptides</u>
- Mouse Ephb4 Blocking Peptide (C-term) Images

# Mouse Ephb4 Blocking Peptide (C-term) - Background

Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B 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. Together with its cognate ligand/functional ligand EFNB2 plays a central role in heart morphogenesis and angiogenesis through regulation of cell adhesion and cell migration. EPHB4- mediated forward signaling controls cellular repulsion and segregation form EFNB2-expressing cells. Plays also a role in postnatal blood vessel remodeling, morphogenesis and permeability and is thus important in the context of tumor angiogenesis.

# Mouse Ephb4 Blocking Peptide (C-term) - References

Ciossek T.,et al.Oncogene 11:2085-2095(1995). Andres A.-C.,et al.Oncogene 9:1461-1467(1994). Wilson M.D.,et al.Nucleic Acids Res. 29:1352-1365(2001). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Gerety S.S.,et al.Mol. Cell 4:403-414(1999).