10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Mouse Ephb3 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP20993a

Specification

Mouse Ephb3 Blocking Peptide (Center) - Product Information

Primary Accession	P54754
Other Accession	P54753

Mouse Ephb3 Blocking Peptide (Center) - Additional Information

Gene ID 13845

Other Names
Ephrin type-B receptor 3, Developmental kinase 5, mDK-5, Tyrosine-protein kinase receptor SEK-4, Ephb3, Etk2, Mdk5, Sek4

Target/Specificity
The synthetic peptide sequence is selected from aa 350-362 of HUMAN Ephb3

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 Ephb3 Blocking Peptide (Center) - Protein Information

Name Ephb3

Synonyms Etk2, Mdk5, Sek4

Function
Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B

Mouse Ephb3 Blocking Peptide (Center) - 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. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. Beside its role in axon guidance plays also an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.

Mouse Ephb3 Blocking Peptide (Center) - References

Ciossek T.,et al.Oncogene 11:2085-2095(1995).
Becker N.,et al.Mech. Dev. 47:3-17(1994).
Orioli D.,et al.EMBO J. 15:6035-6049(1996).
Adams R.H.,et al.Genes Dev. 13:295-306(1999).
Imondi R.,et al.Development 127:1397-1410(2000).

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Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, dendrite

Tissue Location
Expressed in cells of the retinal ganglion cell layer during retinal axon guidance to the optic disk. Expressed by Paneth and progenitor cells in the crypts of the intestinal epithelium (at protein level). Expressed in myogenic progenitor cells (PubMed:27446912).

Mouse Ephb3 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides