

Mouse Ephb3 Antibody (Center) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20993a

Specification

Mouse Ephb3 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>P54754</u> <u>P54753</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 109662

Mouse Ephb3 Antibody (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

This Mouse Ephb3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 350-382 amino acids from the Central region of Mouse Ephb3.

Dilution WB~~1:500-1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Mouse Ephb3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Ephb3 Antibody (Center) - Protein Information

Name Ephb3

Synonyms Etk2, Mdk5, Sek4



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. 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. In addition to its role in axon guidance also plays 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.

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).

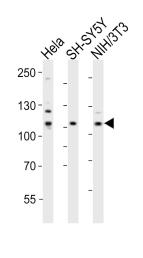
Mouse Ephb3 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Mouse Ephb3 Antibody (Center) - Images





Western blot analysis of lysates from Hela. SH-SY5Y, mouse NIH/3T3 cell line (from left to right), using Ephb3 Antibody (Center)(Cat. #AP20993a). AP20993a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

Mouse Ephb3 Antibody (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. 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 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 Antibody (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).