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Mouse Ephb4 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20989c

Product Information

Application	WB, E
Primary Accession	P54761
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50408
Calculated MW	108848

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	This Mouse Ephb4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 967-1000 amino acids from the C-terminal region of mouse Ephb4.
Dilution	WB~~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 Ephb4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Ephb4
Synonyms	Htk, Mdk2, Myk1
Function	Receptor tyrosine kinase which binds promiscuously to 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 (PubMed:10518221). Phosphorylates inactive tyrosine-protein kinase EPHB6 which promotes interaction of EPHB6 with SH2 domains, allowing it to recruit SH2 domain-containing signaling adapters (By similarity).
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)

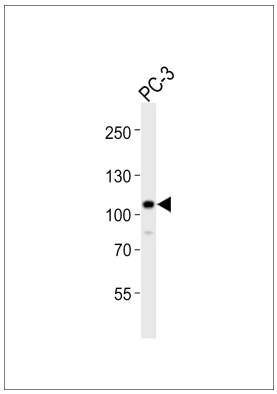
Background

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.

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).

Images



Western blot analysis of lysate from PC-3 cell line, using Mouse Ephb4 Antibody (C-term)(Cat. #AP20989c). AP20989c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.