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Mouse Epha2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14619c

Product Information

Application	WB, E
Primary Accession	Q03145
Other Accession	NP_034269.2
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34764
Calculated MW	108852
Antigen Region	296-323

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
Target/Specificity	This Mouse Epha2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-323 amino acids from the Central region of mouse Epha2.
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 Epha2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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).

Background

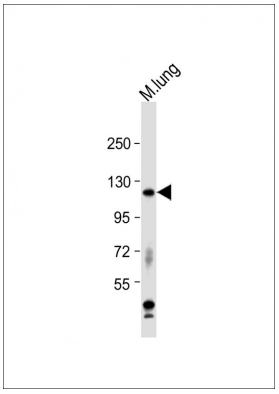
Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A3, -A4 and -A5. Induces apoptosis in a TP53/p53-independent, caspase-8-dependent manner (By similarity). Plays an important role in angiogenesis and tumor neovascularization. The recruitement of VAV2, VAV3 and PI3-kinase p85 subunit by 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.

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)

Images

Anti-Mouse Epha2 Antibody (Center) at 1:1000 dilution + mouse lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase



conjugated at 1/10000 dilution. Predicted band size : 109 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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