10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EFNB2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11652C

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P52799
Other Accession	NP_004084.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31411
Calculated MW	36923
Antigen Region	157-186

Additional Information

Gene ID	1948
Other Names	Ephrin-B2, EPH-related receptor tyrosine kinase ligand 5, LERK-5, HTK ligand, HTK-L, EFNB2, EPLG5, HTKL, LERK5
Target/Specificity	This EFNB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-186 amino acids from the Central region of human EFNB2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	EFNB2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EFNB2
Synonyms	EPLG5, HTKL, LERK5

Function	Cell surface transmembrane ligand for Eph receptors, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Binds promiscuously Eph receptors 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. Binds to receptor tyrosine kinase including EPHA4, EPHA3 and EPHB4. Together with EPHB4 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 from EFNB2-expressing cells. May play a role in constraining the orientation of longitudinally projecting axons.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell junction, adherens junction {ECO:0000250|UniProtKB:P52800}
Tissue Location	Lung and kidney.

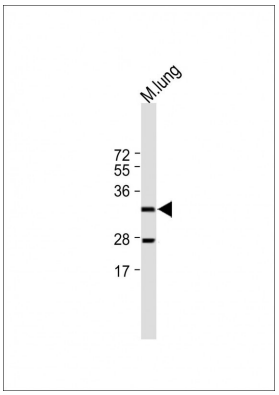
Background

This gene encodes a member of the ephrin (EPH) family. The ephrins and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. This gene encodes an EFNB class ephrin which binds to the EPHB4 and EPHA3 receptors.

References

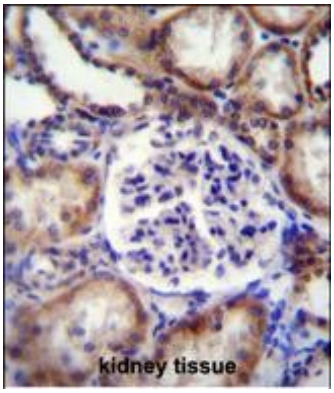
Zhang, R., et al. Psychiatry Res 180(1):5-9(2010)
Bochenek, M.L., et al. J. Cell. Sci. 123 (PT 8), 1235-1246 (2010) :
Nakada, M., et al. Int. J. Cancer 126(5):1155-1165(2010)
Qin, H., et al. J. Biol. Chem. 285(1):644-654(2010)
Kwan Tat, S., et al. Arthritis Res. Ther. 11 (4), R119 (2009) :

Images

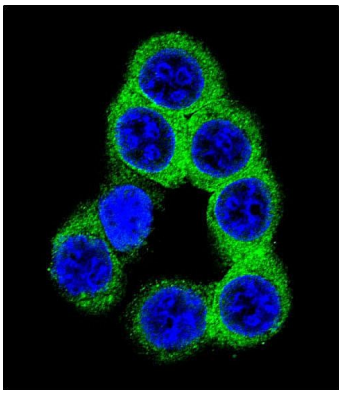


All lanes : Anti-EFNB2 Antibody (Center) at 1:1000 dilution Lane 1: mouse lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 33kDa Blocking/Dilution buffer: 5% NFDM/TBST.

EFNB2 Antibody (Center) (Cat. #AP11652c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary



antibody and DAB staining.This data demonstrates the use of EFNB2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of EFNB2 Antibody (Center)(Cat#AP11652c) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

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