

### **EFNB2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11652C

# **Specification**

#### **EFNB2 Antibody (Center) - Product Information**

WB, IF, IHC-P,E Application **Primary Accession** P52799 Other Accession NP 004084.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 36923 Antigen Region 157-186

### **EFNB2 Antibody (Center) - 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 IF~~1:10~50 IHC-P~~1:10~50

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**

EFNB2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **EFNB2 Antibody (Center) - 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}

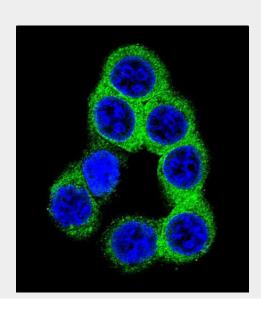
Tissue Location Lung and kidney.

### **EFNB2 Antibody (Center) - Protocols**

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

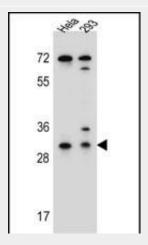
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **EFNB2 Antibody (Center) - Images**

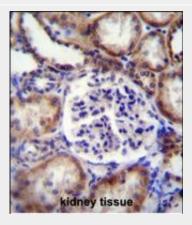




Confocal immunofluorescent analysis of EFNB2 Antibody (Center)(Cat#AP11652c) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



EFNB2 Antibody (Center) (Cat. #AP11652c) western blot analysis in Hela,293 cell line lysates (35ug/lane). This demonstrates the EFNB2 antibody detected the EFNB2 protein (arrow).



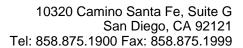
EFNB2 Antibody (Center) (Cat. #AP11652c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of EFNB2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

## EFNB2 Antibody (Center) - 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.

# **EFNB2 Antibody (Center) - 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)