

EFNB1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20103c

Product Information

Application WB, E Primary Accession P98172

Other Accession <u>073612</u>, <u>NP_004420.1</u>

Reactivity Human **Predicted** Chicken Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB42526 38007 **Calculated MW** 88-116 **Antigen Region**

Additional Information

Gene ID 1947

Other Names Ephrin-B1, EFL-3, ELK ligand, ELK-L, EPH-related receptor tyrosine kinase

ligand 2, LERK-2, EFNB1, EFL3, EPLG2, LERK2

Target/Specificity This EFNB1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 88-116 amino acids from the Central

region of human EFNB1.

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 EFNB1 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name EFNB1

Synonyms EFL3, EPLG2, LERK2

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 (PubMed:7973638, PubMed:8070404). Binding to Eph receptors residing on adjacent cells leads to contact-dependent bidirectional signaling into neighboring cells (PubMed:7973638, PubMed:8070404). Shows high affinity for the receptor tyrosine kinase EPHB1/ELK (PubMed:7973638, PubMed:8070404). Can also bind EPHB2 and EPHB3 (PubMed:8070404). Binds to, and induces collapse of, commissural axons/growth cones in vitro (By similarity). May play a role in constraining the orientation of longitudinally projecting axons (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Membrane raft. Note=May recruit GRIP1 and GRIP2 to membrane raft domains [Ephrin-B1 intracellular domain]: Nucleus. Note=Colocalizes with ZHX2 in the nucleus. {ECO:0000250|UniProtKB:P52795}

Tissue Location

Widely expressed (PubMed:7973638, PubMed:8070404). Detected in both neuronal and non-neuronal tissues (PubMed:7973638, PubMed:8070404). Seems to have particularly strong expression in retina, sciatic nerve, heart and spinal cord (PubMed:7973638)

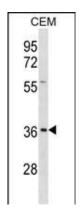
Background

The protein encoded by this gene is a type I membrane protein and a ligand of Eph-related receptor tyrosine kinases. It may play a role in cell adhesion and function in the development or maintenance of the nervous system.

References

Hogue, J., et al. Am. J. Med. Genet. A 152A (10), 2574-2577 (2010): Arvanitis, D.N., et al. Mol. Cell. Biol. 30(10):2508-2517(2010) Makarov, R., et al. BMC Med. Genet. 11, 98 (2010): Vazin, T., et al. PLoS ONE 4 (8), E6606 (2009): Wallis, D., et al. Am. J. Med. Genet. A 146A (15), 2008-2012 (2008):

Images



EFNB1 Antibody (Center) (Cat. #AP20103c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the EFNB1 antibody detected the EFNB1 protein (arrow).

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