

EFNB1 Blocking Peptide (Center) Synthetic peptide Catalog # BP20103c

### Specification

# **EFNB1** Blocking Peptide (Center) - Product Information

Primary Accession Other Accession <u>P98172</u> 073612, <u>NP 004420.1</u>

# **EFNB1** Blocking Peptide (Center) - 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** The synthetic peptide sequence is selected from aa 103-116 of HUMAN EFNB1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### **EFNB1** Blocking Peptide (Center) - 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:<a href="http://www.uniprot.org/citations/8070404"">http://www.uniprot.org/citations/8070404</a>

target="\_blank">8070404</a>, PubMed:<a href="http://www.uniprot.org/citations/7973638" target="\_blank">7973638</a>). Binding to Eph receptors residing on adjacent cells leads to contact-dependent bidirectional signaling into neighboring cells (PubMed:<a

href="http://www.uniprot.org/citations/8070404" target="\_blank">8070404</a>, PubMed:<a href="http://www.uniprot.org/citations/7973638" target="\_blank">7973638</a>). Shows high affinity for the receptor tyrosine kinase EPHB1/ELK (PubMed:<a

href="http://www.uniprot.org/citations/8070404" target="\_blank">8070404</a>, PubMed:<a href="http://www.uniprot.org/citations/7973638" target=" blank">7973638</a>). Can also bind



# EPHB2 and EPHB3 (PubMed:<a href="http://www.uniprot.org/citations/8070404" target="\_blank">8070404</a>). 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:8070404, PubMed:7973638). Detected in both neuronal and non-neuronal tissues (PubMed:8070404, PubMed:7973638). Seems to have particularly strong expression in retina, sciatic nerve, heart and spinal cord (PubMed:7973638)

# **EFNB1 Blocking Peptide (Center) - Protocols**

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

<u>Blocking Peptides</u>

EFNB1 Blocking Peptide (Center) - Images

#### EFNB1 Blocking Peptide (Center) - 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.

#### EFNB1 Blocking Peptide (Center) - 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) :