

### APOER2 (LRP8) Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP6159a

### **Specification**

### APOER2 (LRP8) Antibody (C-term) Blocking peptide - Product Information

**Primary Accession** 

**Q14114** 

# APOER2 (LRP8) Antibody (C-term) Blocking peptide - Additional Information

**Gene ID 7804** 

#### **Other Names**

Low-density lipoprotein receptor-related protein 8, LRP-8, Apolipoprotein E receptor 2, LRP8, APOER2

# **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP6159a>AP6159a</a> was selected from the C-term region of human LRP8 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **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.

### APOER2 (LRP8) Antibody (C-term) Blocking peptide - Protein Information

Name LRP8

Synonyms APOER2

#### **Function**

Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands (PubMed:<a href="http://www.uniprot.org/citations/20223215" target="\_blank">20223215</a>). LRP8 participates in transmitting the extracellular Reelin signal to intracellular signaling processes, by binding to DAB1 on its cytoplasmic tail. Reelin acts via both the VLDL receptor (VLDLR) and LRP8 to regulate DAB1 tyrosine phosphorylation and microtubule function in neurons. LRP8 has higher affinity for Reelin than VLDLR. LRP8 is thus a key component of the Reelin pathway which governs neuronal layering of the forebrain during embryonic brain development. Binds the endoplasmic reticulum resident receptor-associated protein (RAP). Binds dimers of beta 2-glycoprotein I and may be involved in the suppression of platelet aggregation in the vasculature. Highly expressed in



Tel: 858.875.1900 Fax: 858.875.1999

the initial segment of the epididymis, where it affects the functional expression of clusterin and phospholipid hydroperoxide glutathione peroxidase (PHGPx), two proteins required for sperm maturation. May also function as an endocytic receptor. Not required for endocytic uptake of SEPP1 in the kidney which is mediated by LRP2 (By similarity). Together with its ligand, apolipoprotein E (apoE), may indirectly play a role in the suppression of the innate immune response by controlling the survival of myeloid- derived suppressor cells (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Secreted. Note=Isoforms that contain the exon coding for a furin-type cleavage site are proteolytically processed, leading to a secreted receptor fragment.

#### **Tissue Location**

Expressed mainly in brain and placenta. Also expressed in platelets and megakaryocytic cells. Not expressed in the liver.

### APOER2 (LRP8) Antibody (C-term) Blocking peptide - Protocols

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

### Blocking Peptides

APOER2 (LRP8) Antibody (C-term) Blocking peptide - Images

## APOER2 (LRP8) Antibody (C-term) Blocking peptide - Background

LPR8 is an apolipoprotein E receptor, a member of the low density lipoprotein receptor (LDLR) family. Apolipoprotein E is a small lipophilic plasma protein and a component of lipoproteins such as chylomicron remnants, very low density lipoprotein (VLDL), and high density lipoprotein (HDL). The apolipoprotein E receptor is involved in cellular recognition and internalization of these lipoproteins.

### APOER2 (LRP8) Antibody (C-term) Blocking peptide - References

Li, X., et al., Biochemistry 42(35):10406-10417 (2003).Sun, X.M., et al., J. Biol. Chem. 278(22):19926-19932 (2003).Korschineck, I., et al., J. Biol. Chem. 276(16):13192-13197 (2001).Sun, X.M., et al., Eur. J. Biochem. 262(1):230-239 (1999). Trommsdorff, M., et al., Cell 97(6):689-701 (1999).