

**Phospho-LPR1(S4520) Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP3143a****Specification**

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**Phospho-LPR1(S4520) Antibody Blocking peptide - Product Information**Primary Accession [Q07954](#)**Phospho-LPR1(S4520) Antibody Blocking peptide - Additional Information****Gene ID** 4035**Other Names**

Prolow-density lipoprotein receptor-related protein 1, LRP-1, Alpha-2-macroglobulin receptor, A2MR, Apolipoprotein E receptor, APOER, CD91, Low-density lipoprotein receptor-related protein 1 85 kDa subunit, LRP-85, Low-density lipoprotein receptor-related protein 1 515 kDa subunit, LRP-515, Low-density lipoprotein receptor-related protein 1 intracellular domain, LRPICD, LRP1, A2MR, APR

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP3143a](/product/products/AP3143a) was selected from the region of human Phospho-LPR1-S452. 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.

**Phospho-LPR1(S4520) Antibody Blocking peptide - Protein Information****Name** LRP1 ([HGNC:6692](#))**Synonyms** A2MR, APR**Function**

Endocytic receptor involved in endocytosis and in phagocytosis of apoptotic cells (PubMed:[11907044](http://www.uniprot.org/citations/11907044), PubMed:[12713657](http://www.uniprot.org/citations/12713657)). Required for early embryonic development (By similarity). Involved in cellular lipid homeostasis. Involved in the plasma clearance of chylomicron remnants and activated LRPAP1 (alpha 2-macroglobulin), as well as the local metabolism of complexes between plasminogen activators and their endogenous

inhibitors. Acts as an LRPAP1 alpha-2- macroglobulin receptor (PubMed:<a href="http://www.uniprot.org/citations/26142438" target="\_blank">26142438</a>, PubMed:<a href="http://www.uniprot.org/citations/1702392" target="\_blank">1702392</a>). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed:<a href="http://www.uniprot.org/citations/32296178" target="\_blank">32296178</a>). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed:<a href="http://www.uniprot.org/citations/12888553" target="\_blank">12888553</a>).

#### **Cellular Location**

[Low-density lipoprotein receptor-related protein 1 85 kDa subunit]: Cell membrane; Single-pass type I membrane protein Membrane, coated pit [Low-density lipoprotein receptor-related protein 1 intracellular domain]: Cytoplasm Nucleus. Note=After cleavage, the intracellular domain (LRPICD) is detected both in the cytoplasm and in the nucleus.

#### **Tissue Location**

Most abundant in liver, brain and lung.

### **Phospho-LPR1(S4520) Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **Phospho-LPR1(S4520) Antibody Blocking peptide - Images**

### **Phospho-LPR1(S4520) Antibody Blocking peptide - Background**

LPR1 is involved in the plasma clearance of chylomicron remnants and activated alpha 2-macroglobulin, as well as the local metabolism of complexes between plasminogen activators and their endogenous inhibitors.

### **Phospho-LPR1(S4520) Antibody Blocking peptide - References**

Yu, G., et al., Blood 105(9):3545-3551 (2005).Cam, J.A., et al., J. Biol. Chem. 280(15):15464-15470 (2005).Niemeier, A., et al., J. Bone Miner. Res. 20(2):283-293 (2005).Spijkers, P.P., et al., Blood 105(1):170-177 (2005).Deane, R., et al., Neuron 43(3):333-344 (2004).