

Phospho-LPR1(S4520) Antibody Blocking peptide

Synthetic peptide Catalog # BP3143a

Specification

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 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, PubMed: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:26142438, PubMed:1702392). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed:32296178). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed:12888553).

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).