

**Phospho-LPR1(S4520) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3143a**

**Specification**

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**Phospho-LPR1(S4520) Antibody - Product Information**

Application	WB, IHC-P, DB,E
Primary Accession	<a href="#">Q07954</a>
Other Accession	<a href="#">Q91ZX7</a> , <a href="#">G3V928</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

**Phospho-LPR1(S4520) Antibody - 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**

This LPR1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S4520 of human LPR1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
DB~~1:500  
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**

Phospho-LPR1(S4520) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-LPR1(S4520) Antibody - 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:[1702392](#), PubMed:[26142438](#)). 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](#)). Also acts as a receptor for IGFBP3 to mediate cell growth inhibition (PubMed:[9252371](#)).

#### **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**

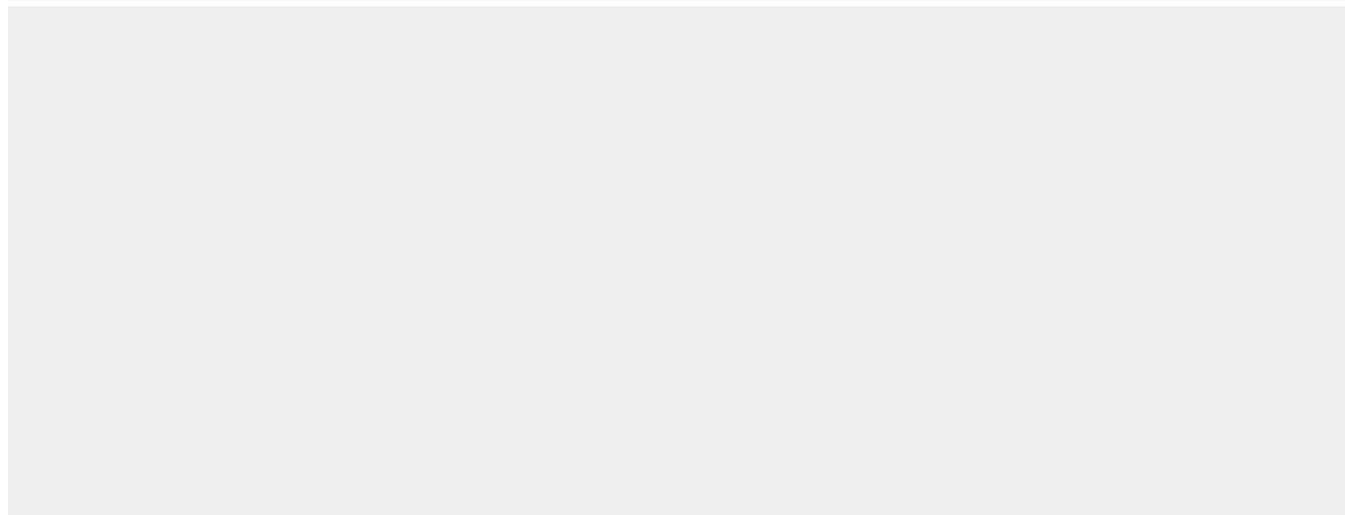
Most abundant in liver, brain and lung.

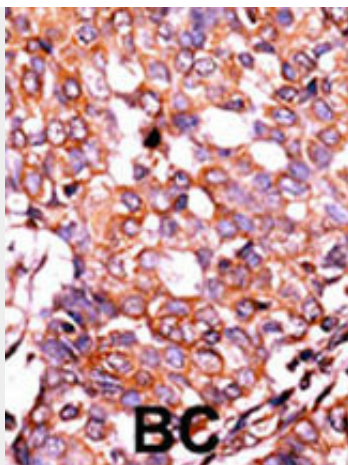
### **Phospho-LPR1(S4520) Antibody - Protocols**

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

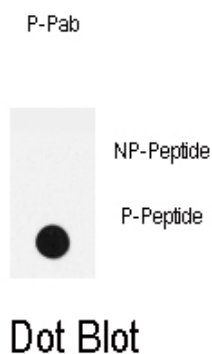
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Dot blot analysis of anti-Phospho-LPR1-S4520 Antibody (Cat.#AP3143a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

### Phospho-LPR1(S4520) Antibody - 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 - 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).