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

Specification

Phospho-LPR1(S4520) Antibody - Product Information

Application	**IHC-P, DB,E**
Primary Accession	Q07954
Other Accession	Q91ZX7, G3V928
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
IHC-P~~1:50~100
DB~~1:500

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: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.

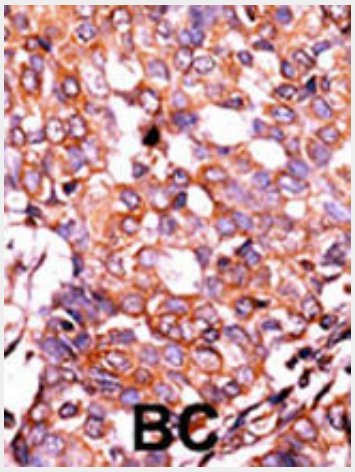
Tissue Location
Most abundant in liver, brain and lung.

Phospho-LPR1(S4520) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-LPR1(S4520) Antibody - Images



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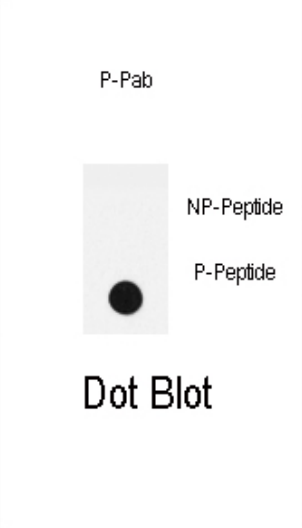
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast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