

# Phospho-LPR1(S4520) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3143a

#### **Product Information**

**Application** WB, DB, IHC-P, E

**Primary Accession** Q07954 **Other Accession** Q91ZX7 Reactivity Human **Predicted** Mouse Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB07140 504606 Calculated MW

### **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 DB~~1:500 IHC-P~~1:100~500 E~~Use at an assay dependent

concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

#### **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.

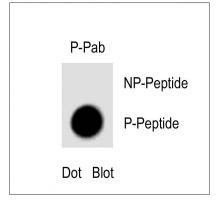
## **Background**

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.

#### References

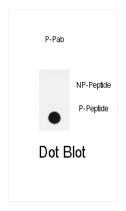
Yu, G., et al., Blood 105(9):3545-3551 (2005). Cam, J.A., et al., J. Biol. Chem. 280(15):15464-15470 (2005). Niemeier, A., et al., J. Bone Miner. Res. 20(2):283-293 (2005). Spijkers, P.P., et al., Blood 105(1):170-177 (2005). Deane, R., et al., Neuron 43(3):333-344 (2004).

#### **Images**

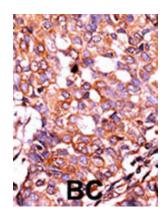


Dot blot analysis of Phospho-LPR1(S4520) Antibody (Cat. AP3143a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0. 5ug per ml.

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.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.