

# LPR1(S4520) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22410a

## **Product Information**

**Application** WB, E **Primary Accession** Q07954 **Predicted** Mouse Host Rabbit Clonality polyclonal Isotype Rabbit Ig **Clone Names** R02614NP Calculated MW 504606

## **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 (HGNC:6692), A2MR, APR

**Target/Specificity** This LPR1(S4520) antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between amino acids from the human region of

human LPR1(S4520).

**Dilution** WB~~1:2000 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** 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.

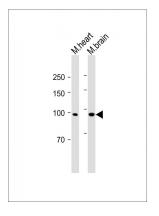
# **Background**

Endocytic receptor involved in endocytosis and in phagocytosis of apoptotic cells (PubMed: <a href="https://doi.org/11907044">11907044</a>, PubMed: <a href="https://doi.org/11907044">12713657</a>). 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="https://doi.org/10.26142438">26142438</a>, PubMed: <a href="https://doi.org/10.26142438">1702392</a>). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed: <a href="https://doi.org/10.26142438">2296178</a>). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed: <a href="https://doi.org/10.2888553">12888553</a>).

## References

Herz J., et al.EMBO J. 7:4119-4127(1988). Van Leuven F., et al.Genomics 24:78-89(1994). Van Leuven F., et al.Genomics 52:138-144(1998). Scherer S.E., et al.Nature 440:346-351(2006). Kutt H., et al.Biochim. Biophys. Acta 1009:229-236(1989).

## **Images**



All lanes: Anti-LPR1(S4520) Antibody at 1:2000 dilution Lane 1: Mouse heart lysate Lane 2: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 90 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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