

# LPR1(S4520) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22410a

## **Product Information**

WB, E
<u>Q07954</u>
Mouse
Rabbit
polyclonal
Rabbit Ig
R02614NP
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 ( <u>HGNC:6692</u> ), 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 ( <u>HGNC:6692</u> )
Synonyms	A2MR, APR

Function	Endocytic receptor involved in endocytosis and in phagocytosis of apoptotic cells (PubMed: <u>11907044</u> , PubMed: <u>12713657</u> ). 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: <u>1702392</u> , PubMed: <u>26142438</u> ). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed: <u>32296178</u> ). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed: <u>12888553</u> ). Also acts as a receptor for IGFBP3 to mediate cell growth inhibition (PubMed: <u>9252371</u> ).
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: <u>11907044</u>, PubMed:<u>12713657</u>). 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:<u>26142438</u>, PubMed:<u>1702392</u>). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed:<u>32296178</u>). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed:<u>12888553</u>).

# 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'.