

### Anti-LRP1 antibody [EPR3724] ab92544

KO 評価済 リコンビナント RabMAb

★★★★★ 9 Abreviews 159 References 画像数 16

#### 製品の概要

製品名	Anti-LRP1 antibody [EPR3724]
製品の詳細	Rabbit monoclonal [EPR3724] to LRP1
由来種	Rabbit
アプリケーション	適用あり: IHC-P, WB, IP, Flow Cyt (Intra), ICC/IF
種交差性	交差種: Mouse, Rat, Human, Pig
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: PMBC and A549 cell lysates; mouse brain, heart, kidney and spleen tissue lysates; rat brain, heart, kidney or spleen tissue lysates; human fetal brain tissue lysates; pig liver and heart tissue lysates. IHC-P: Human liver, clear cell carcinoma, brain, lung and placenta tissues. ICC/IF: U87-MG cells. Flow Cyt (intra): Jurkat cells. IP: A549 cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR3724

アイソタイプ

IgG

## アプリケーション

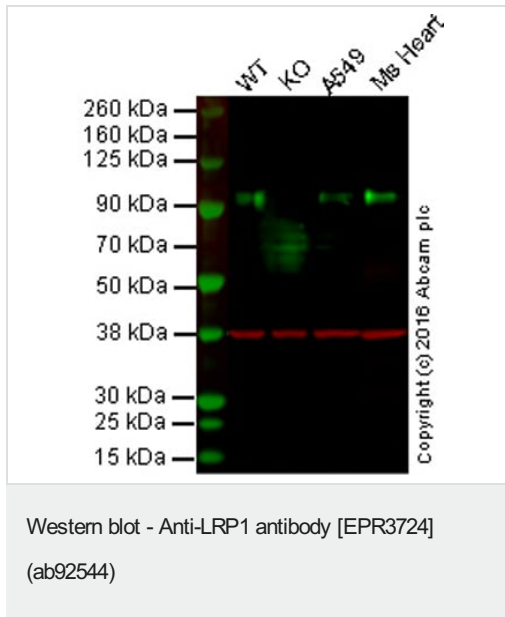
**The Abpromise guarantee** Abpromise保証は、 次のテスト済みアプリケーションにおけるab92544の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (3)	1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocols</a> . <b>For unpurified use at 1/5000 - 1/10000.</b>
WB	★★★★★ (2)	1/50000. Predicted molecular weight: 85 kDa. <b>For unpurified use at 1/20000 - 1/50000.</b>
IP		1/30. <b>For unpurified use at 1/50.</b>
Flow Cyt (Intra)		1/100. For unpurified use at 1/1000. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (3)	1/100. <b>For unpurified use at 1/5000 - 1/10000.</b>

## ターゲット情報

機能	Endocytic receptor involved in endocytosis and in phagocytosis of apoptotic cells. Required for early embryonic development. 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. May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission. Functions as a receptor for Pseudomonas aeruginosa exotoxin A.
組織特異性	Most abundant in liver, brain and lung.
配列類似性	Belongs to the LDLR family. Contains 22 EGF-like domains. Contains 31 LDL-receptor class A domains. Contains 34 LDL-receptor class B repeats.
翻訳後修飾	Cleaved into a 85 kDa membrane-spanning subunit (LRP-85) and a 515 kDa large extracellular domain (LRP-515) that remains non-covalently associated. Gamma-secretase-dependent cleavage of LRP-85 releases the intracellular domain from the membrane. The N-terminus is blocked. Phosphorylated on serine and threonine residues. Phosphorylated on tyrosine residues upon stimulation with PDGF. Tyrosine phosphorylation promotes interaction with SHC1.
細胞内局在	Cytoplasm. Nucleus. After cleavage, the intracellular domain (LRPICD) is detected both in the

## 画像



**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

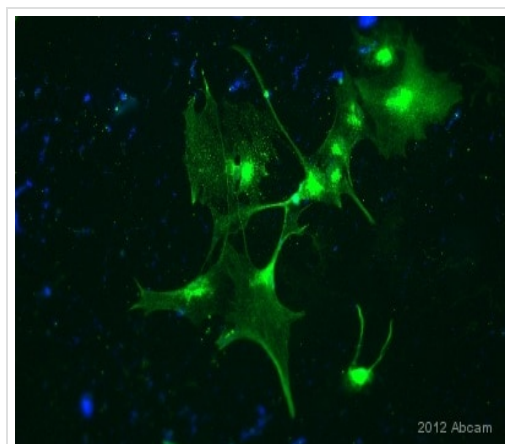
**Lane 2:** LRP1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** A549 cell lysate (20 µg)

**Lane 4:** Mouse heart tissue lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab92544 observed at 92 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

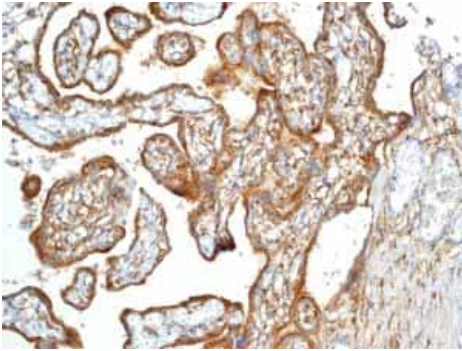
ab92544 was shown to specifically react with LRP1 in wild-type HAP1 cells. No band was observed when LRP1 knockout samples were used. Wild-type and LRP1 knockout samples were subjected to SDS-PAGE. ab92544 and [ab8245](#) (loading control to GAPDH) were diluted at 1/5000 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-LRP1 antibody [EPR3724] (ab92544)

This image is courtesy of an abreview submitted by Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

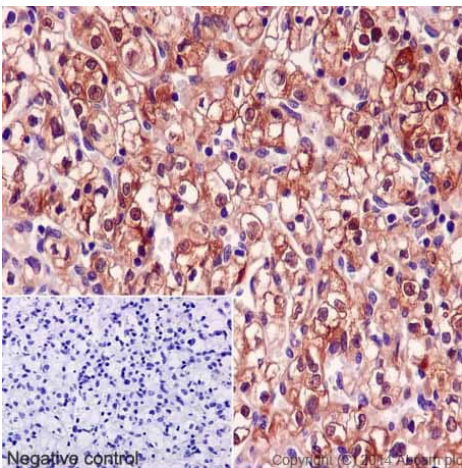
ICC/IF image of LRP1 staining on rat mixed glia culture using unpurified ab92544 (1:200). The cells were fixed using paraformaldehyde. The cells were then permeabilised using 0.1% TritonX in 0.1% PBS. Non-specific protein was blocked using 10% donkey serum at 24°C for 1 hour. ab92544 was diluted (1/200) using 0.1% TritonX with 0.1% PBS and 10% donkey serum and the cells were incubated for 4 hours at 24°C. The secondary antibody used was donkey polyclonal to Rabbit IgG conjugated to Alexa Fluor® 488. DAPI was used to stain the nucleus.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LRP1 antibody [EPR3724] (ab92544)

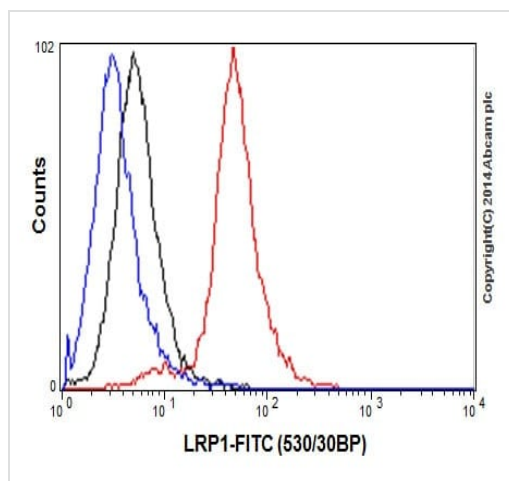
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal human placenta tissue labelling LRP1 with unpurified ab92544.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



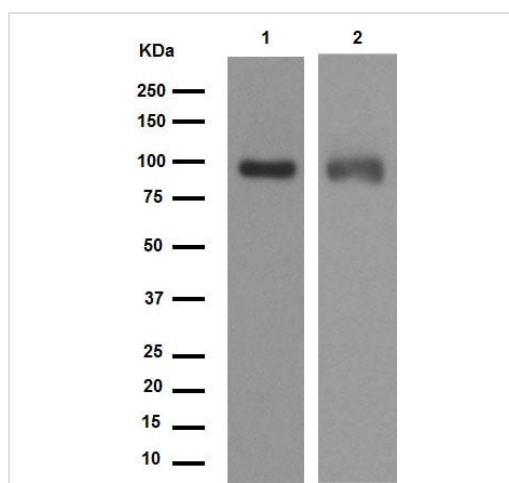
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LRP1 antibody [EPR3724] (ab92544)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human clear cell carcinoma of the kidney tissue labelling LRP1 with purified ab92544 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Flow Cytometry (Intracellular) - Anti-LRP1 antibody  
[EPR3724] (ab92544)

Intracellular Flow Cytometry analysis of Jurkat cells labelling LRP1 with purified ab92544 at 1/100 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-LRP1 antibody [EPR3724]  
(ab92544)

**All lanes** : Anti-LRP1 antibody [EPR3724] (ab92544) at 1/50000 dilution (purified)

**Lane 1** : A549 cell lysate

**Lane 2** : Human fetal brain tissue lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

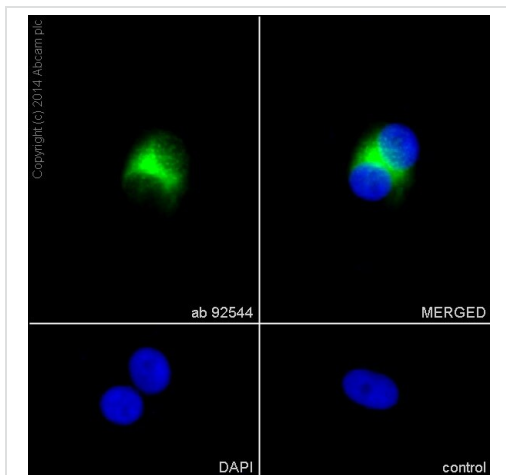
**All lanes** : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

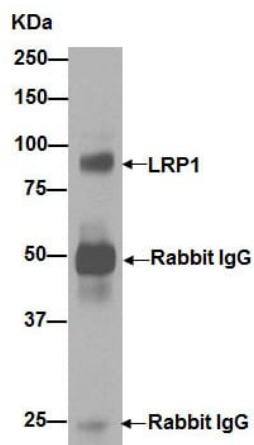
Diluting buffer and concentration: 5% NFDM /TBST.



Immunocytochemistry/ Immunofluorescence - Anti-LRP1 antibody [EPR3724] (ab92544)

Immunocytochemistry/Immunofluorescence analysis of U87-MG cells labelling LRP1 with purified ab92544 at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

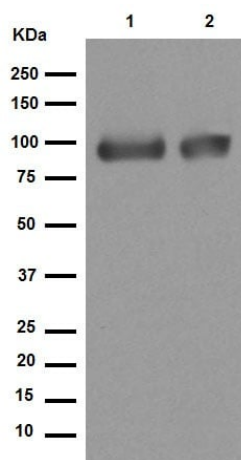


Immunoprecipitation - Anti-LRP1 antibody [EPR3724] (ab92544)

ab92544 (purified) at 1/30 immunoprecipitating LRP1 in A549 cell lysate. For western blotting, a peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-LRP1 antibody [EPR3724]  
(ab92544)

**All lanes :** Anti-LRP1 antibody [EPR3724] (ab92544) at 1/50000 dilution (purified)

**Lane 1 :** Mouse brain tissue lysate

**Lane 2 :** Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

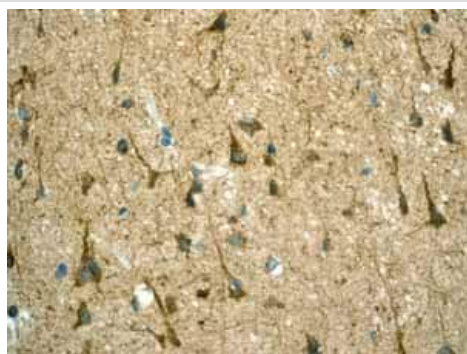
**All lanes :** Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

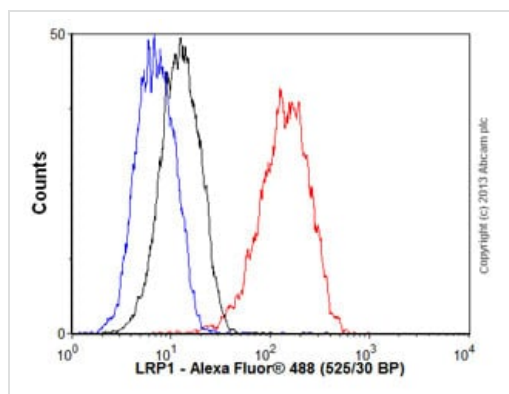


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LRP1 antibody  
[EPR3724] (ab92544)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal human brain tissue labelling LRP1 with unpurified ab92544.

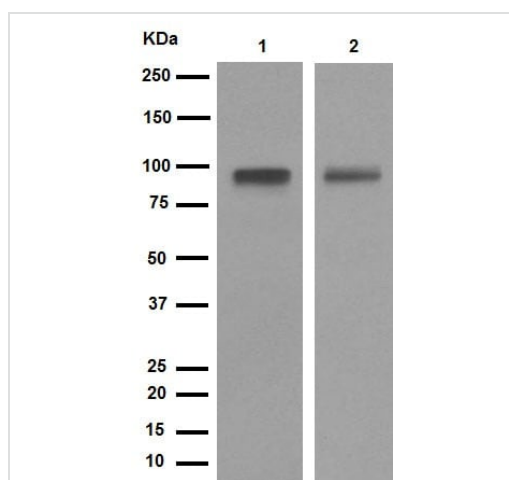
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.





Flow Cytometry (Intracellular) - Anti-LRP1 antibody  
[EPR3724] (ab92544)

Overlay histogram showing Jurkat cells stained with unpurified ab92544 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab92544, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-LRP1 antibody [EPR3724]  
(ab92544)

**All lanes** : Anti-LRP1 antibody [EPR3724] (ab92544) at 1/50000 dilution (purified)

**Lane 1** : Pig liver tissue lysate

**Lane 2** : Pig heart tissue lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes** : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

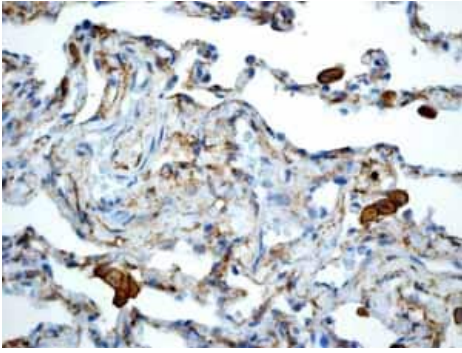
**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

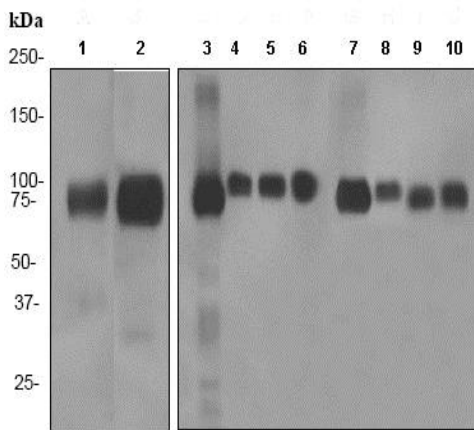




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LRP1 antibody [EPR3724] (ab92544)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal human lung tissue labelling LRP1 with unpurified ab92544.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-LRP1 antibody [EPR3724] (ab92544)

**All lanes :** Anti-LRP1 antibody [EPR3724] (ab92544) at 1/20000 dilution (unpurified)

**Lane 1 :** Human PMBC lysate

**Lane 2 :** A549 lysate

**Lane 3 :** Mouse brain lysate

**Lane 4 :** Mouse heart lysate

**Lane 5 :** Mouse kidney lysate

**Lane 6 :** Mouse spleen lysate

**Lane 7 :** Rat brain lysate

**Lane 8 :** Rat heart lysate

**Lane 9 :** Rat kidney lysate

**Lane 10 :** Rat spleen lysate

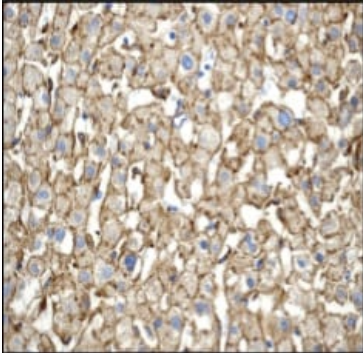
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling LRP1 with unpurified ab92544 at 1/100.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LRP1 antibody [EPR3724] (ab92544)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-LRP1 antibody [EPR3724] (ab92544)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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