


Anti-LRP6 antibody [EPR2423(2)] ab134146

KO 評価済 リコンビナント RabMAb

★★★★☆ 5 Abreviews 29 References 画像数 3

製品の概要

製品名	Anti-LRP6 antibody [EPR2423(2)]
製品の詳細	Rabbit monoclonal [EPR2423(2)] to LRP6
由来種	Rabbit
アプリケーション	適用あり: WB 適用なし: Flow Cyt, ICC/IF, IHC-P or IP
種交差性	交差種: Human 交差が予測される動物種: Mouse, Rat 
免疫原	Synthetic peptide within Human LRP6 aa 1500-1600. The exact sequence is proprietary.
ポジティブ・コントロール	WB: HAP1, HeLa, HepG2, 293T, and Jurkat whole cell lysate (ab7899).
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR2423(2)
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ab134146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
WB	★★★★★ (3)	1/1000 - 1/10000. Predicted molecular weight: 180 kDa.

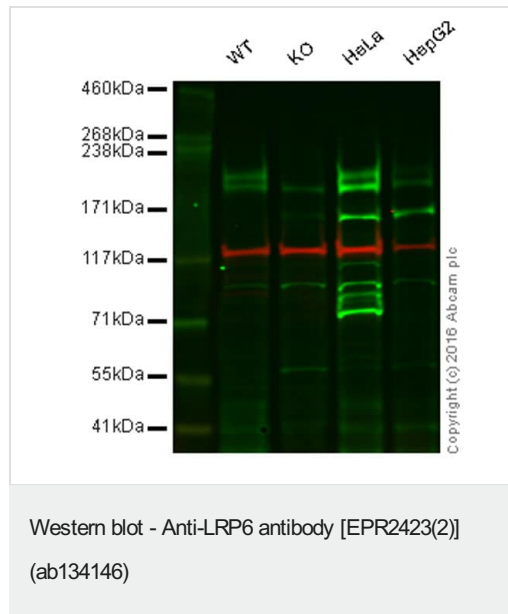
追加情報 Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

ターゲット情報

機能	Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers beta-catenin signaling through inducing aggregation of receptor-ligand complexes into ribosome-sized signalsomes. Cell-surface coreceptor of Wnt/beta-catenin signaling, which plays a pivotal role in bone formation. The Wnt-induced Fzd/LRP6 coreceptor complex recruits DVL1 polymers to the plasma membrane which, in turn, recruits the AXIN1/GSK3B-complex to the cell surface promoting the formation of signalsomes and inhibiting AXIN1/GSK3-mediated phosphorylation and destruction of beta-catenin. Required for posterior patterning of the epiblast during gastrulation.
組織特異性	Widely co-expressed with LRP5 during embryogenesis and in adult tissues.
関連疾患	Defects in LRP6 are the cause of autosomal dominant coronary artery disease type 2 (ADCAD2) [MIM:610947].
配列類似性	Belongs to the LDLR family. Contains 4 EGF-like domains. Contains 3 LDL-receptor class A domains. Contains 20 LDL-receptor class B repeats.
ドメイン	The YWTD-EGF-like domains 1 and 2 are required for the interaction with Wnt-frizzled complex. The YWTD-EGF-like domains 3 and 4 are required for the interaction with DKK1. The PPPSP motifs play a central role in signal transduction by being phosphorylated, leading to activate the Wnt signaling pathway.
翻訳後修飾	Dual phosphorylation of cytoplasmic PPPSP motifs sequentially by GSK3 and CK1 is required for AXIN1-binding, and subsequent stabilization and activation of beta-catenin via preventing GSK3-mediated phosphorylation of beta-catenin. Phosphorylated, in vitro, by GRK5/6 within and outside the PPPSP motifs. Phosphorylation at Ser-1490 by CDK14 during G2/M phase leads to regulation of the Wnt signaling pathway during the cell cycle. Phosphorylation by GSK3B is induced by RPSO1 binding and inhibited by DKK1. Phosphorylated, in vitro, by casein kinase I on Thr-1479. Undergoes gamma-secretase-dependent regulated intramembrane proteolysis (RIP). The extracellular domain is first released by shedding, and then, through the action of gamma-secretase, the intracellular domain (ICD) is released into the cytoplasm where it is free to bind to GSK3B and to activate canonical Wnt signaling. Palmitoylation on the two sites near the transmembrane domain leads to release of LRP6 from the endoplasmic reticulum. Mono-ubiquitinated which retains LRP6 in the endoplasmic reticulum. N-glycosylation is required for cell surface location.
細胞内局在	Membrane. Endoplasmic reticulum. On Wnt signaling, undergoes a cycle of caveolin- or clathrin-

mediated endocytosis and plasma membrane location. Released from the endoplasmic reticulum on palmitoylation. Mono-ubiquitination retains it in the endoplasmic reticulum in the absence of palmitoylation. On Wnt signaling, phosphorylated, aggregates and colocalizes with AXIN1 and GSK3B at the plasma membrane in LRP6-signalsomes. Chaperoned to the plasma membrane by MESD.

画像



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

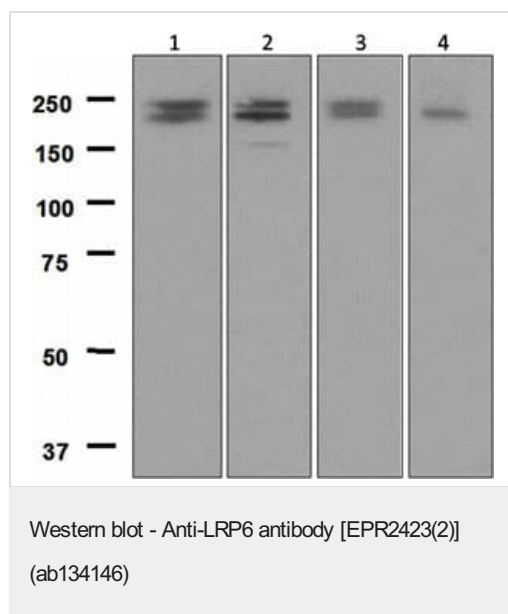
Lane 2: LRP6 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab134146 observed at 220 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab134146 was shown to recognize LRP6 when LRP6 knockout samples were used, along with additional cross-reactive bands. Wild-type and LRP6 knockout samples were subjected to SDS-PAGE. ab134146 and **ab18058** (loading control to Vinculin) were diluted 1/10000 and 1/1000 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 1/10000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-LRP6 antibody [EPR2423(2)] (ab134146) at 1/1000 dilution

Lane 1 : HeLa cell lysates

Lane 2 : HepG2 cell lysates

Lane 3 : 293T cell lysates

Lane 4 : Jurkat cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 180 kDa

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-LRP6 antibody [EPR2423(2)] (ab134146)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors