# abcam

### Product datasheet

## Anti-LRP6 antibody ab24386

★★★★★ 1 Abreviews 7 References 画像数1

#### 製品の概要

製品名 Anti-LRP6 antibody

製品の詳細 Goat polyclonal to LRP6

由来種 Goat

アプリケーション 適用あり: IHC-P 種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Chicken, Dog, Chimpanzee

免疫原 Synthetic peptide:

**CMTSVATAKGYTSDL** 

, corresponding to amino acids 1546-1560 of Human LRP6

Run BLAST with Run BLAST with

ポジティブ・コントロール

IHC-P: Human kidney tissue.

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 freeze / thaw cycles.

バッファー

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

精製度 Immunogen affinity purified

特記事項(精製) Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

ポリモノ ポリクローナル

#### 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ab24386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		Use a concentration of 4 - 6 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### 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 a dult 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 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.

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.

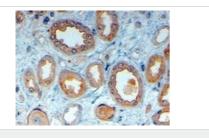
翻訳後修飾

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#### 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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LRP6 antibody (ab24386)

ab24386 staining LRP6 in Human Kidney at  $4\mu g/ml$  by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Sections were subjected to steamed antigen retrieval with citrate buffer pH 6.0, and antibody was visualised with HRP-staining.

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