#2560 Store at –20°C

LRP6 (C5C7) Rabbit mAb

Cell Signaling TECHNOLOGY®

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 4040
Swiss-Prot Acc. # 075581

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP Endogenous	H, R	180, 210 kDa	Rabbit IgG**

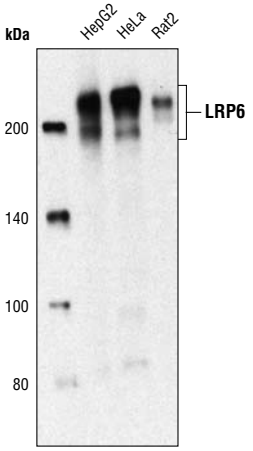
Background: LRP5 and LRP6 are single-pass transmembrane proteins belonging to the low-density-lipoprotein receptor (LDLR) related protein family. Unlike other members of the LDLR family, LRP5 and LRP6 have four EGF and three LDLR repeats in the extracellular domain and proline-rich motifs in the cytoplasmic domain (1). They function as co-receptors for Wnt and are required for the canonical Wnt/β-catenin signaling pathway (2,3). LRP5 and LRP6 are highly homologous and have redundant roles during development (4,5). The activity of LRP5 and LRP6 can be inhibited by the binding of some members of the Dickkopf (DKK) family of proteins (6,7). Upon stimulation with Wnt, LRP6 is phosphorylated at multiple sites including Thr1479, Ser1490 and Thr1493 by kinases such as GSK-3 and CK1 (8-10). The phosphorylated LRP6 recruits axin to the membrane, and presumably activates β-catenin signaling (8-10).

Specificity/Sensitivity: LRP6 (C5C7) Rabbit mAb detects endogenous levels of total LRP6 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Met1409 of human LRP6.

Background References:

(1) Brown, S.D. et al. (1998) *Biochem. Biophys. Res. Commun.* 248, 879-888.
(2) Pinson, K.I. et al. (2000) *Nature* 407, 535-538.
(3) Tamai, K. et al. (2000) *Nature* 407, 530-535.
(4) Kelly, O.G. et al. (2004) *Development* 131, 2803-2815.
(5) He, X. et al. (2004) *Development* 131, 1663-1677.
(6) Semënov, M.V. et al. (2001) *Curr Biol* 11, 951-61.
(7) Bafico, A. et al. (2001) *Nat. Cell Biol.* 3, 683-668.
(8) Tamai, K. et al. (2004) *Mol. Cell* 13, 149-156.
(9) Zeng, X. et al. (2005) *Nature* 438, 873-877.
(10) Davidson, G. et al. (2005) *Nature* 438, 867-872.



Western blot analysis of total cell lysates from HepG2, HeLa and Rat2 cells using LRP6 (C5C7) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

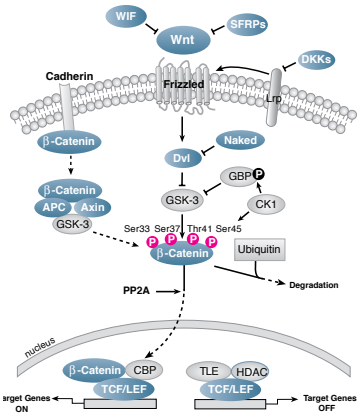
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.



IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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