LRP6 (C47E12) Rabbit mAb

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 coreceptors 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 (C47E12) Rabbit mAb detects endogenous levels of total LRP6 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to an extracellular region surrounding Met988 of human LRP6 protein.

Background References:

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.

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: W, IP
Species Cross-Reactivity: H, M, (R)
Molecular Wt.: 180, 210 kDa
Source: Rabbit IgG**

Western blot analysis of extracts from Hep G2 and HeLa cells using LRP6 (C47E12) Rabbit mAb.