



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C
#3395

LRP6 (C47E12) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 180, 210	Source/Isotype: Rabbit IgG	UniProt ID: #O75581	Entrez-Gene Id: 4040
-------------------------------	---------------------------	-----------------------------------	------------------------------	--------------------------------------	-------------------------------	--------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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.

Specificity/Sensitivity

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

Species predicted to react based on 100% sequence homology

Rat

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

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). Phosphorylated LRP6 recruits axin to the membrane and presumably activates β-catenin signaling (8-10).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.