

## LRP1 Antibody



**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

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	85	Rabbit	#Q07954	4035

### 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 and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

LRP1 Antibody recognizes endogenous levels of total LRP1 β subunit.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human LRP1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Low density lipoprotein receptor related protein 1 (LRP1) is a type I transmembrane receptor that mediates the endocytosis of various ligands (1). LRP1 plays important roles in lipid homeostasis, signaling transduction, embryonic development, and glucose metabolism (2-6). In addition, LRP1 regulates APP processing and facilitates the clearance of beta-amyloid (7-9). This finding makes LRP1 a potential therapeutic target for Alzheimer's disease. LRP1 preprotein is proteolytically processed by furin to generate a 515 kDa extracellular α subunit and a membrane-anchored 85 kDa β subunit, which together form the mature receptor (10).

### Background References

1. Lillis, A.P. et al. (2008) *Physiol Rev* 88, 887-918.
2. Herz, J. et al. (1988) *EMBO J* 7, 4119-27.
3. van der Geer, P. (2002) *Trends Cardiovasc Med* 12, 160-5.
4. May, P. and Herz, J. (2003) *Traffic* 4, 291-301.
5. Zilberberg, A. et al. (2004) *J Biol Chem* 279, 17535-42.
6. Hofmann, S.M. et al. (2007) *J Clin Invest* 117, 3271-82.
7. Cam, J.A. et al. (2005) *J Biol Chem* 280, 15464-70.
8. Bu, G. et al. (2006) *Ann N Y Acad Sci* 1086, 35-53.
9. Bell, R.D. et al. (2009) *Nat Cell Biol* 11, 143-53.
10. Willnow, T.E. et al. (1996) *Biochem J* 313 (Pt 1), 71-6.

### 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 **R:** Rat

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