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#5058

## NPC1L1 Antibody

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 140	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q9UHC9	<b>Entrez-Gene Id:</b> 29881
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### 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

NPC1L1 Antibody detects endogenous levels of total NPC1L1 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to central residues of human NPC1L1 protein. Antibodies were purified by protein A and peptide affinity chromatography.

### Background

Niemann-Pick C1-like 1 (NPC1L1) is a transmembrane protein that plays a critical role in cholesterol absorption (1). It is highly expressed in small intestine and localized along the brush border in both human and mouse epithelial cells (2,3). NPC1L1 mediates cholesterol uptake via vesicular endocytosis (4). Ezetimibe, a potent cholesterol absorption inhibitor used to treat hypercholesterolemia (5), inhibits cholesterol uptake by preventing NPC1L1 from incorporating into clathrin-coated vesicles (4).

### Background References

1. Altmann, S.W. et al. (2004) *Science* 303, 1201-4.
2. Davis, H.R. et al. (2004) *J Biol Chem* 279, 33586-92.
3. Sané, A.T. et al. (2006) *J Lipid Res* 47, 2112-20.
4. Ge, L. et al. (2008) *Cell Metab* 7, 508-19.
5. Davis, H.R. and Veltri, E.P. (2007) *J Atheroscler Thromb* 14, 99-108.

### 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

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