

#3243 Store at -20°C

LAMP1 (C54H11) Rabbit mAb



100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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info@cellsignal.com
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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 #3916
Swiss-Prot Acc. #Q8WU33

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, Mk	42 kDa (non-glycosylated) 90-120 kDa (glycosylated)	Rabbit IgG**

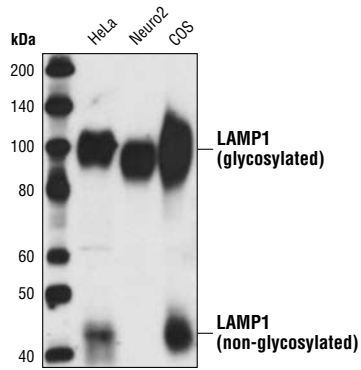
Background: LAMP1 and LAMP2 (lysosome-associated membrane protein 1 and 2) are two abundant lysosomal membrane proteins (1,2). Both are transmembrane proteins and heavily glycosylated at the amino-terminal luminal side of the lysosomal inner leaflet, which protects the proteins from proteolysis (3). The carboxy terminus of LAMP1 is exposed to the cytoplasm and contains a tyrosine sorting motif which targets LAMP1 to lysosomal membranes (4). LAMP1 and LAMP2 are 37% homologous in their protein sequences. The cellular functions of these two proteins are also overlap - both are involved in regulating lysosomal motility during lysosome-phagosome fusion and cholesterol trafficking (5,6).

Specificity/Sensitivity: LAMP1 (C54H11) Rabbit mAb detects endogenous levels of total LAMP1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide surrounding Ser140 of human LAMP1.

Background References:

- (1) Eskelinen, E.L. et al. (2003) *Trends Cell Biol* 13, 137-45.
- (2) Fukuda, M. (1991) *J Biol Chem* 266, 21327-30.
- (3) Kundra, R. and Kornfeld, S. (1999) *J Biol Chem* 274, 31039-46.
- (4) Rohrer, J. et al. (1996) *J Cell Biol* 132, 565-76.
- (5) Huynh, K.K. et al. (2007) *EMBO J* 26, 313-24.
- (6) Eskelinen, E.L. et al. (2004) *Mol Biol Cell* 15, 3132-45.



Western blot analysis of extracts from various cell types using LAMP1 (C54H11) Antibody.

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

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 non fat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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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.