

## Datasheet: AHP2167

<b>Description:</b>	RABBIT ANTI HUMAN MAP1LC3A/B (N-TERMINAL)
<b>Specificity:</b>	MAP1LC3A/B (N-TERMINAL)
<b>Other names:</b>	Atg8-LC3
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			1/100 - 1/250
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Mouse <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antiserum to human LC3A was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Synthetic peptide sequence PSDRPFKQRRSFADC from the N-Terminal region of LC3A

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**External Database Links**

**UniProt:**

[Q9H492](#)      [Related reagents](#)  
[Q9GZQ8](#)      [Related reagents](#)  
[Q91VR7](#)      [Related reagents](#)  
[Q9CQV6](#)      [Related reagents](#)

**Entrez Gene:**

[84557](#)    MAP1LC3A    [Related reagents](#)  
[81631](#)    MAP1LC3B    [Related reagents](#)  
[66734](#)    Map1lc3a    [Related reagents](#)  
[67443](#)    Map1lc3b    [Related reagents](#)

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**Synonyms**

Map1alc3, MAP1ALC3, Map1lc3

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**Specificity**

**Rabbit anti Human MAP1LC3A/B (N-Terminal) antibody** specifically recognizes an epitope within the N-Terminal (NT) region of both MAP1LC3A (Microtubule-associated proteins 1A/1B light chain 3A/LC3A) and MAP1LC3B (Microtubule-associated proteins 1A/1B light chain 3B/LC3B), ubiquitin-like proteins and members of the MAP1LC3 family, which are widely used as reliable markers for the monitoring of autophagy.

LC3-I is the cytosolic form of LC3, which is converted into the active, membrane-bound form LC3-II, during the autophagy process. Tracking the level of conversion of LC3-I to LC3-II provides an indicator of autophagic activity, and levels of LC3-II in particular, correlate with the extent of autophagosome formation, due to its association with the autophagosome membrane.

Rabbit anti Human MAP1LC3A/B (N-Terminal) antibody recognizes both the LC3-I and LC3-II forms of MAP1LC3A and MAP1LC3B.

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**Western Blotting**

AHP2167 detects a band of approximately 14-15kDa corresponding to LC3-II, and a band of approximately 17kDa corresponding to LC3-I, in HeLa cell lysates.

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**References**

1. Iwata, A. *et al.* (2005) HDAC6 and microtubules are required for autophagic degradation of aggregated huntingtin. [J Biol Chem. 280 \(48\): 40282-92.](#)
2. Riley, B.E. *et al.* (2010) Ubiquitin accumulation in autophagy-deficient mice is dependent on the Nrf2-mediated stress response pathway: a potential role for protein aggregation in autophagic substrate selection. [J Cell Biol. 191 \(3\): 537-52.](#)
3. Gjyshi, O. *et al.* (2015) Kaposi's Sarcoma-Associated Herpesvirus Induces Nrf2 Activation in Latently Infected Endothelial Cells through SQSTM1 Phosphorylation and Interaction with Polyubiquitinated Keap1. [J Virol. 89: 2268-86](#)
4. Huang, L. *et al.* (2014) AKI after conditional and kidney-specific knockdown of stanniocalcin-1. [J Am Soc Nephrol. 25: 2303-15.](#)
5. Girard, B.J. *et al.* (2015) Cytoplasmic PELP1 and ERRgamma Protect Human Mammary Epithelial Cells from Tam-Induced Cell Death. [PLoS One. 10 \(3\): e0121206.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

<b>Shelf Life</b>	18 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Sheep Anti Rabbit IgG (STAR36...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),  
[DyLight@680](#), [DyLight@800](#)
- Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

### Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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