

Datasheet: AHP2167T

**BATCH NUMBER 1608**

<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>	25 µg

## 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	▪			1/1000 - 1/5000
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>	<p>Reacts with: Mouse</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid

**Antiserum Preparation** 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 (NP_115903.1; NP_852610.1).
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">Q9H492</a>      <a href="#">Related reagents</a></p> <p><a href="#">Q9GZQ8</a>      <a href="#">Related reagents</a></p> <p><a href="#">Q91VR7</a>      <a href="#">Related reagents</a></p> <p><a href="#">Q9CQV6</a>      <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">84557</a>    MAP1LC3A    <a href="#">Related reagents</a></p> <p><a href="#">81631</a>    MAP1LC3B    <a href="#">Related reagents</a></p> <p><a href="#">66734</a>    Map1lc3a    <a href="#">Related reagents</a></p> <p><a href="#">67443</a>    Map1lc3b    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Map1alc3, MAP1ALC3, Map1lc3
<b>RRID</b>	AB_10673306
<b>Specificity</b>	<p><b>Rabbit anti Human MAP1LC3A/B (N-Terminal) antibody</b> 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.</p> <p>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.</p> <p>Rabbit anti Human MAP1LC3A/B (N-Terminal) antibody recognizes both the LC3-I and LC3-II forms of MAP1LC3A and MAP1LC3B.</p>
<b>Western Blotting</b>	AHP2167T 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.

## 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.

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## Guarantee

12 months from date of despatch

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## Health And Safety Information

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/AHP2167T>  
10040

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## Regulatory

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)  
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)  
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)  
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

#### North & South America

Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

#### Worldwide

Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739  
Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

#### Europe

Tel: +49 (0) 89 8090 95 21  
Fax: +49 (0) 89 8090 95 50  
Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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