

Datasheet: AHP2167

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

	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.

Target Species	Human
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Species Cross Reactivity	<p>Reacts with: Mouse</p> <p>N.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>
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Product Form	Purified IgG - liquid
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Antiserum Preparation	Antiserum to human LC3A was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
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Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Synthetic peptide sequence PSDRPFKQRRSFADC from the N-Terminal region of LC3A (NP_115903.1; NP_852610.1).
External Database Links	<p>UniProt:</p> <p>Q9H492 Related reagents</p> <p>Q9GZQ8 Related reagents</p> <p>Q91VR7 Related reagents</p> <p>Q9CQV6 Related reagents</p> <p>Entrez Gene:</p> <p>84557 MAP1LC3A Related reagents</p> <p>81631 MAP1LC3B Related reagents</p> <p>66734 Map1lc3a Related reagents</p> <p>67443 Map1lc3b Related reagents</p>
Synonyms	Map1alc3, MAP1ALC3, Map1lc3
RRID	AB_10698191
Specificity	<p>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.</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>
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.
References	1. Iwata, A. <i>et al.</i> (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.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Useful Reagents

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M382551:210513'

Printed on 18 May 2021