

# Datasheet: AHP2167 BATCH NUMBER 155880

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	<b>Not Determined</b>	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.

reactivity is derived from testing within our laboratories, peer-reviewed publications	Target Species	Human
Product Form Purified IgG - liquid	-	<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
	Product Form	Purified IgG - liquid

Antiserum Preparation Antiserum to human LC3A was raised by repeated immunisation of rabbits with highly

purified antigen.	Purified IaG wa	as prepared b	v affinity	chromatography.

Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )		
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	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		
Synonyms	Map1alc3, MAP1ALC3, Map1lc3		
RRID	AB_10698191		
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.		
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. *et al.* (2005) HDAC6 and microtubules are required for autophagic degradation of aggregated huntingtin. <u>J Biol Chem. 280 (48): 40282-92.</u>
- 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. <u>J Virol. 89: 2268-86</u>
- 4. Huang, L. *et al.* (2014) AKI after conditional and kidney-specific knockdown of stanniocalcin-1. <u>J Am Soc Nephrol</u>. 25: 2303-15.
- 5. Girard, B.J. *et al.* (2015) Cytoplasmic PELP1 and ERRgamma Protect Human Mammary Epithelial Cells from Tam-Induced Cell Death. <u>PLoS One. 10 (3): e0121206.</u>

**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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP2167">https://www.bio-rad-antibodies.com/SDS/AHP2167</a> 10040

**Regulatory** For research purposes only

#### 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

#### **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 'M373278:200907'

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