Datasheet: AHP2167T

BATCH NUMBER 154035

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:	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.

	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

Species Cross Reactivity

Reacts with: Mouse
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.

Product Form

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.

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

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_10673306
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	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. <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. <u>J Cell Biol. 191 (3): 537-52.</u>
	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. 25: 2303-15.</u>
	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:
	https://www.bio-rad-antibodies.com/SDS/AHP2167T
	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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M373279:200907'

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