



## MONOCLONAL ANTIBODY

*For research use only. Not for clinical diagnosis.*

**Catalog No. CTB-LC3-1-100**

# Anti LC3 (Clone: LC3.No.6)

## BACKGROUND

LC3B is one of the mammalian Atg8 homologs and widely used as an autophagosome marker. Immediately after synthesis, LC3 is processed by Atg4 and becomes LC3-I. Upon induction of autophagy, the C-terminal glycine of LC3-I is conjugated to phosphatidylethanolamine, resulting in formation of membrane-bound LC3-II. Most LC3-II is thought to be present on autophagosome membrane. The autophagosome subsequently fuses with a lysosome, where inside materials, including LC3-II, are degraded. The expression level of LC3-II generally correlates with the number of autophagosome.

LC3B は酵母 Atg8 の哺乳類ホモログのひとつで、オートファゴソームのマーカーとして利用されています。LC3 は合成された直後に Atg4 によって切断され LC3-I となります。オートファジーが誘導されると、LC3-I の C 末端グリシンにホスファチジルエタノールアミンが共有結合し、LC3-II となります。LC3-II は膜結合型であり、その多くはオートファゴソーム膜に存在すると考えられています。オートファゴソームはリソソームと融合することによってその内部が分解されるため、LC3-II 自身もオートファジーによって分解されます。一般に LC3-II の量はオートファゴソームの量とよく相関します。

<b>Product type</b>	Primary antibodies
<b>Host</b>	Mouse
<b>Source</b>	
<b>Form</b>	Liquid Protein G purified PBS (pH7.4) with 1% BSA and less than 0.1% NaN <sub>3</sub> as a preservative.
<b>Volume</b>	1 ml
<b>Concentration</b>	0.1mg/ml
<b>Specificity</b>	LC3
<b>Antigen</b>	Human Recombinant LC3
<b>Clone</b>	LC3.No.6
<b>Isotype</b>	IgG2b

## Application notes

WB

### Recommended use

### Recommended dilutions

Western blotting, 1/500 to 1/1,000

Predicted molecular weight: LC3-I is 18 kDa and LC3-II is 16 kDa

Optimal dilutions/concentrations should be determined by the end user.

### Staining Pattern

## Cross reactivity

Mouse, Human

## Storage

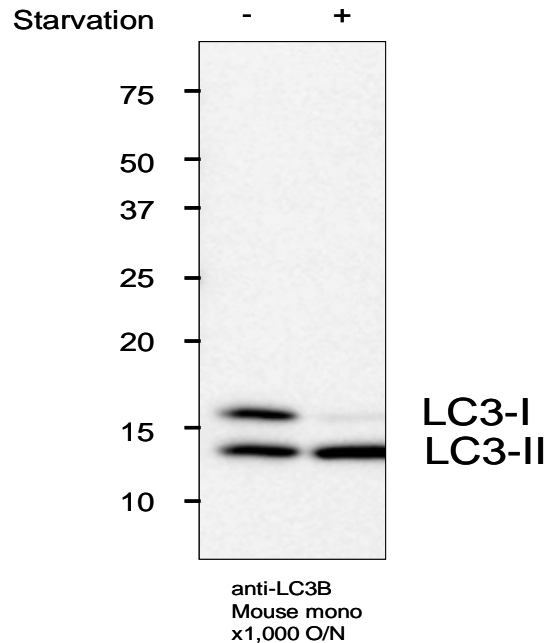
Store below -20°C (below -70°C for prolonged storage).

Aliquot to avoid cycles of freeze/thaw.



References

- 1) Kabeya, Y., Mizushima, N., Ueno, T., Yamamoto, A., Kirisako, T., Noda, T., Kominami, E., Ohsumi, Y. and Yoshimori, T. LC3, a mammalian homologue of yeast Apg8p, is localized in autophagosome membranes after processing EMBO J. 19, 5720-5728. (2000)
- 2) Mizushima, N., Yoshimori, T. How to interpret LC3 immunoblotting Autophagy 3:542-545 (2007)



MEF +/- Starvation 2 hr  
SDS-PAGE(MEF lysate 15 ug/lane, 15% gel)  
Transfer to PVDF membrane(semi-dry blotter, 100 mA/gel 1hr)  
Immunoblot for LC3B  
Expose ECL 5min

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