

# Anti-LC3A/B (3E9) Mouse Monoclonal Antibody

#### Introduction

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. These proteins are involved in formation of autophagosomal vacuoles (autophagosomes). MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. MAP1LC3a is one of the light chain subunits and can associate with either MAP1A or MAP1B. The precursor molecule is cleaved by APG4B/ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II.

## Product parameters

Alternative Names	LC3; LC3A; ATG8E; MAP1ALC3; MAP1BLC3; MAP1LC3A; LC3B; ATG8F; MAP1LC3B-a; MAP1A/1BLC3; MAP1LC3B
Gene ID	84557/81631
Gene Name	MAP1LC3A/MAP1LC3B
SwissProt ID	Q9H492/Q9GZQ8
Host	Mouse
Reactivity	Human, Rat
Molecular Weight	Calculated MW: 14 kDa; Observed MW: 14,16 kDa
Conjugation	Unconjugated
Ex	-
Em /	E-BIO APE-BIO
Modification	Unmodified Achieve Perfection, Explore the Unknown
Clonality	lgG2b
Isotype	Monoclonal Antibody
Clonality No.	AP-16F2C2
Form	Liquid
Concentration	See label

Carrier	Carrier Not Free
Immunogen	Synthetic peptide corresponding to human LC3B protein
Purification	Affinity Purified
Buffer System	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Application	WB
Dilution Ratio	WB: 1/500-1/1000
Res <mark>earch</mark> Field	Signal Transduction
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

### Protocol

Configure the product according to the application range and recommended dilution ratio.

\*Note: The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).





#### Note

1. This product is for scientific research use only.













