Product Datasheet

LC3A/B (3E9) Mouse mAb

Catalog No: AB3420 Reactivity: Human,Rat

Isotype: Mouse IgG2b Applications: WB

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Information

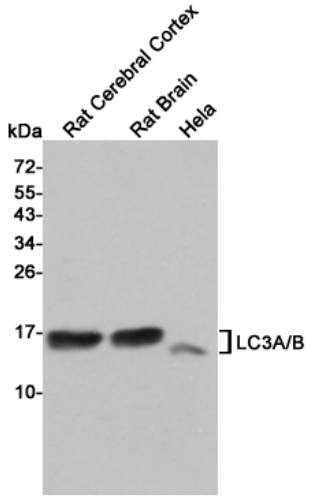
UniProt ID: Q9H492/Q9GZQ8
All Names: LC3; LC3A; ATG8E; MAP1ALC3; MAP1BLC3; MAP1LC3A; LC3B; ATG8F; MAP1LC3B-a; MAP1A/1BLC3; MAP1LC3B
Form: Liquid
Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer: pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity: Affinity-chromatography
Immunogen: A synthesized peptide
Molecular Wt.: 14/16kDa

Application

WB 1:500-1:1000

Background

Swiss-Prot Acc.Q9H492,Q9GZQ8.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.



Western blot detection of LC3A/B in Rat Cerebral Cortex,Rat Brain and Hela cell lysates using LC3A/B Mouse mAb (1:1000 diluted). Predicted band size: 15KDa. Observed band size:14, 16KDa.