

## **Product datasheet for TA384698S**

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# MAP1LC3A Mouse Monoclonal Antibody [Clone ID: 3E9-E5-C9]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 3E9-E5-C9

Applications: WB

**Reactivity:** WB: 1/1000 Human, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Synthetic peptide corresponding to human LC3B protein

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.03% Proclin 300, pH 7.3.

**Concentration:** lot specific

Purification: Affinity Purified Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: 14/16kDa

**Gene Name:** microtubule associated protein 1 light chain 3 alpha

Database Link: Entrez Gene 84557 Human

Q9H492



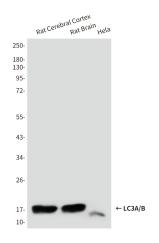
#### Background:

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.

Synonyms:

LC3; LC3A; MAP1ALC3; MAP1BLC3; OTTHUMP00000030698

### **Product images:**



Western blot analysis of LC3A/B in rat Cerebral Cortex, rat Brain and Hela lysates using LC3A/B antibody.