

LC3 (Phospho-Thr50) polyclonal antibody

Catalog: AP0413

Host: Rabbit

Reactivity: Human

BackGround:

Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents. Autophagy is generally activated by conditions of nutrient deprivation, but it has also been associated with a number of physiological processes including development, differentiation, neurodegenerative diseases, infection, and cancer. Autophagy marker Light Chain 3 (LC3) was originally identified as a subunit of microtubule-associated proteins 1A and 1B (termed MAP1LC3) and subsequently found to contain similarity to the yeast protein Apg8/Aut7/Cvt5 critical for autophagy. Three human LC3 isoforms (LC3A, LC3B, and LC3C) undergo posttranslational modifications during autophagy. Cleavage of LC3 at the carboxy terminus immediately following synthesis yields the cytosolic LC3-I form. During autophagy, LC3-I is converted to LC3-II through lipidation by a ubiquitin-like system involving Atg7 and Atg3 that allows for LC3 to become associated with autophagic vesicles. The presence of LC3 in autophagosomes and the conversion of LC3 to the lower migrating form, LC3-II, have been used as indicators of autophagy.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

- **Molecular Weight:**
- ~ 17 kDa
- **Swiss-Prot:**

Q9H492/Q9GZQ8

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum

by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB 1:500~1:1000

Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Specificity:

LC3 (Phospho-Thr50) polyclonal antibody detects endogenous levels of LC3 protein only when phosphorylated at Thr50.

DATA:



Western blot (WB) analysis of LC3 (Phospho-Thr50) polyclonal antibody at 1:500 dilution

Lane1:Hela whole cell lysate(30ug)

Lane1.field whole cell fysale(50ug)

Lane2:Hela treated with serum starvation(20h) whole cell lysate(30ug)

Lane3:Hela treated with Torin(250nM, 4h) whole cell lysate(30ug)

Note:

For research use only, not for use in diagnostic procedure.

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