

For Research Use Only

LC3 Polyclonal antibody

Catalog Number: 12135-1-AP **67 Publications**



Basic Information

Catalog Number: 12135-1-AP	GenBank Accession Number: BC015810	Purification Method: Antigen affinity purification
Size: 200 µg/ml	GeneID (NCBI): 84557	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	UNIPROT ID: Q9H492	
Isotype: IgG	Full Name: microtubule-associated protein 1 light chain 3 alpha	
Immunogen Catalog Number: AG2781	Calculated MW: 121 aa, 14 kDa	

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA	Positive Controls: WB: Chloroquine treated HEK-293 cells, Chloroquine treated HeLa cells IHC: human breast cancer tissue, human liver cancer tissue IF: Starvation treated HEK-293 cells,
Cited Applications: WB, IF, IHC	
Species Specificity: human, mouse, rat, zebrafish	
Cited Species: turtle, human, chicken, rat, mouse, pig	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

LC3, also known as microtubule-associated protein 1 light chain 3 (MAP1LC3), is a mammalian homolog of the yeast Atg8p (autophagy-related 8 protein) that is involved in autophagy process. Three isoforms of LC3 exist as LC3A, LC3B, and LC3C. LC3 is first synthesized as pro-LC3, and undergoes C-terminal cleavage to yield a cytosolic precursor known as LC3-I. During autophagy LC3-I is subsequently conjugated to PE lipid as lipidated form: LC3-II. The lipidated form migrates faster on SDS-PAGE gel. The increased level of LC3-II has been widely used as autophagy marker. This antibody recognizes both LC3-I (18-20 kDa) and LC3-II (14-16 kDa).

Notable Publications

Author	Pubmed ID	Journal	Application
Chengni Jin	32910998	Food Chem Toxicol	WB
Xiafang Wu	31781319	Oxid Med Cell Longev	WB
Linqiang Zhang	33075563	Cell Mol Gastroenterol Hepatol	WB

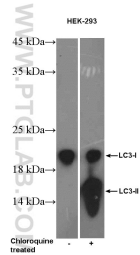
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

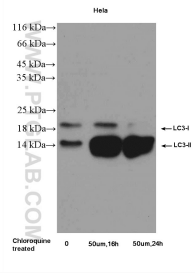
For technical support and original validation data for this product please contact:
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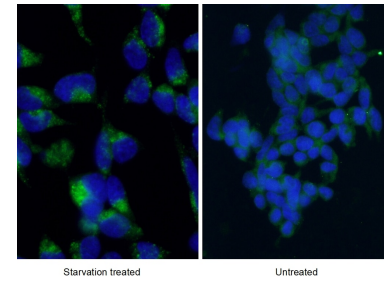
Selected Validation Data



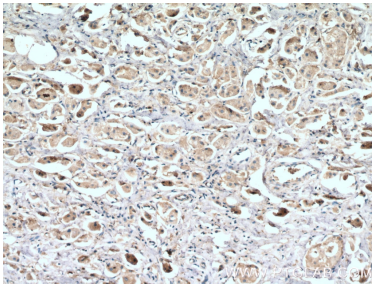
Chloroquine treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 12135-1-AP (LC3 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Chloroquine treated HeLa cells were subjected to SDS PAGE followed by western blot with 12135-1-AP (LC3 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of starvation treated HEK-293 cells using 12135-1-AP (LC3 Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Cells were fixed with ethanol at -20 °C. 20 mM chloroquine was used to block the autophagy flux.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 12135-1-AP (LC3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).