For Research Use Only

LC3 Recombinant antibody

Catalog Number:81004-1-RR

Featured Product

27 Publications



Basic Information

Catalog Number: GenBank Accession Number: BC067797

81004-1-RR GeneID (NCBI): Size: 100ul, Concentration: 1000 ug/ml by 81631

Nanodrop: ENSEMBL Gene ID: ENSG00000140941 Rabbit **UNIPROT ID:** Isotype: Q9GZQ8

IgG Full Name:

Immunogen Catalog Number: microtubule-associated protein 1

AG6144 light chain 3 beta

Calculated MW: 15 kDa Observed MW: 14-18 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA

Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat, pig

Cited Species:

human, mouse, rat, bovine, sheep

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method: Protein A purification

CloneNo.: 5P12

Recommended Dilutions:

WB: 1:2000-1:10000 IHC: 1:250-1:1000 IF/ICC: 1:500-1:2000

Positive Controls:

WB: mouse brain tissue, HEK-293 cells, HeLa cells, Chloroquine treated HEK-293 cells, Chloroquine

treated HeLa cells

IHC: human colon cancer tissue, mouse brain tissue

IF/ICC: Chloroquine treated HeLa cells,

Background Information

 ${\tt Map1LC3, also \, known \, as \, LC3, is \, the \, human \, homolog \, of \, yeast \, Atg8 \, and \, is \, involved \, in \, the \, formation \, of \, and \, involved \, in \, the \, formation \, of \, and \, involved \, in \, the \, formation \, of \, and \, involved \, in \, the \, formation \, of \, and \, and$ autophagosomal vacuoles, called autophagosomes. Three human Map1LC3 isoforms, MAP1LC3A, MAP1LC3B, and MAP1LC3C, undergo post-translational modifications during autophagy. And they differ in their post-translation modifications during autophagy. Map1LC3 also exists in two modified forms, an 18 kDa cytoplasmic form that was originally identified as a subunit of the microtubule-associated protein 1, and a 14-16 kDa form that is associated with the autophagosome membrane.

Notable Publications

Author	Pubmed ID	Journal	Application
Xue-Jiao Liu	40061589	World J Gastroenterol	WB,IF
Shihua Deng	40016828	J Transl Med	WB
Hongzhu Zhang	39986118	Redox Biol	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

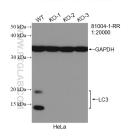
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

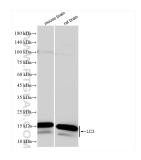
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

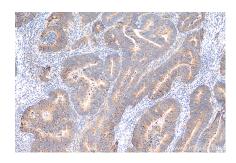
Selected Validation Data



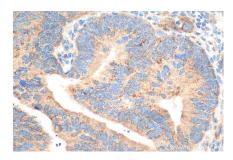
WB result of LC3 antibody (81004-1-RR; 1:20000; room temperature for 1.5 hours) with negative Control and LC3 knockout HeLa cells.



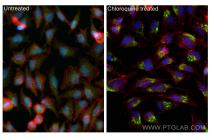
mouse brain tissue were subjected to SDS PAGE followed by western blot with 81004-1-RR (LC3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



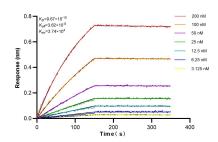
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 81004-1-RR (LC3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 81004-1-RR (LC3 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed Chloroquine treated HeLa cells using LC3 antibody (81004-1-RR, Clone: 5P12) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CoraLite@594 Beta Actin antibody (CL594-66009, Clone: 2D4H5, red).



Biolayer interferometry (BLL) kinetic assays of 81004-1-RR against Human LC3 were performed. The affinity constant is 0.967 nM.