

For Research Use Only

LC3 Recombinant antibody

Catalog Number: 81004-1-RR

Featured Product

21 Publications



Basic Information

Catalog Number: 81004-1-RR	GenBank Accession Number: BC067797	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 81631	CloneNo.: 5P12
Source: Rabbit	ENSEMBL Gene ID: ENSG00000140941	Recommended Dilutions: WB 1:2000-1:10000 IHC 1:250-1:1000 IF/ICC 1:500-1:2000
Isotype: IgG	UNIPROT ID: Q9GZQ8	
Immunogen Catalog Number: AG6144	Full Name: microtubule-associated protein 1 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

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

Map1LC3, also known as LC3, is the human homolog of yeast Atg8 and is involved in the formation of 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
Hongzhu Zhang	39986118	Redox Biol	IF
Hongzhu Zhang	39890062	J Dairy Sci	WB
Zibo Xu	39761761	Biochim Biophys Acta Mol Basis Dis	WB,IF

Storage

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

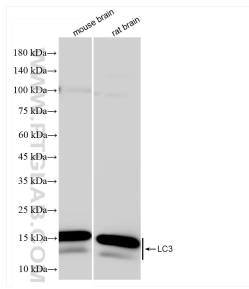
For technical support and original validation data for this product please contact:

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

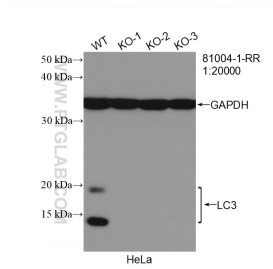
E: proteintech@ptglab.com
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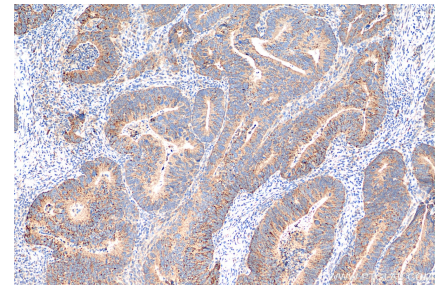
Selected Validation Data



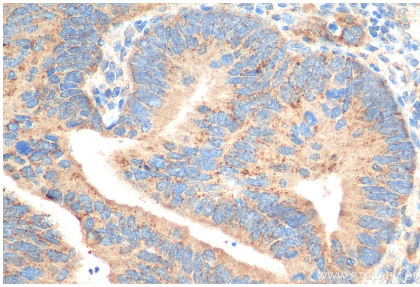
mouse brain tissue were subjected to SDS PAGE followed by western blot with 81004-1-RR (LC3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



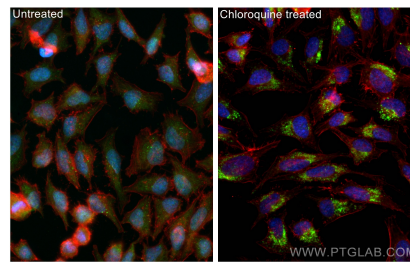
WB result of LC3 antibody (81004-1-RR; 1:20000; room temperature for 1.5 hours) with negative Control and LC3 knockout HeLa cells.



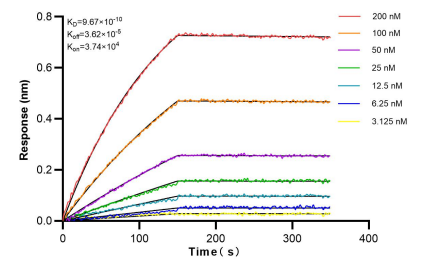
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 81004-1-RR (LC3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded 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).



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