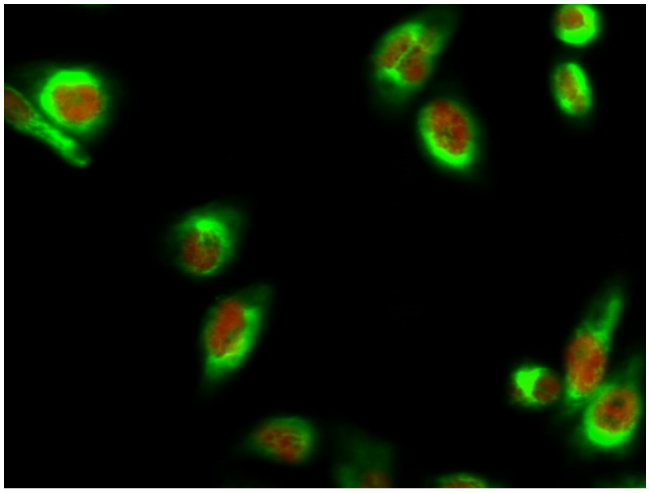
LC3A mouse Monoclonal Antibody(5G10)

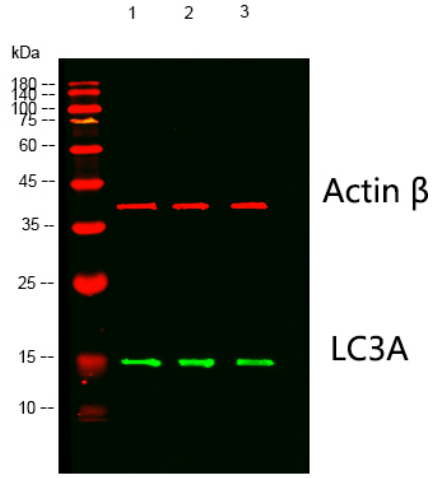
Catalog No	YP-Ab-04848
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB;IF;IHC
Gene Name	MAP1LC3A
Protein Name	LC3A
Immunogen	Synthetic Peptide of LC3A
Specificity	LC3A protein detects endogenous levels of LC3A
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000, IHC 1:100-200 IF 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Microtubule-associated proteins 1A/1B light chain 3A (Autophagy-related protein LC3 A) (Autophagy-related ubiquitin-like modifier LC3 A) (MAP1 light chain 3-like protein 1) (MAP1A/MAP1B light chain 3 A) (MAP1A/MAP1B LC3 A) (Microtubule-associated protein 1 light chain 3 alpha)
Observed Band	14,16kD
Cell Pathway	Cytoplasmic vesicle, autophagosome membrane ; Lipid-anchor . Endomembrane system ; Lipid-anchor . Cytoplasm, cytoskeleton . LC3-II binds to the autophagic membranes. .
Tissue Specificity	Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.
Function	function:Probably involved in formation of autophagosomal vacuoles (autophagosomes).,PTM: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.,similarity:Belongs to the MAP1 LC3 family.,subcellular location:LC3-II binds to the autophagic membranes.,subunit:3 different light chains, LC1, LC2 and LC3, can associate with MAP1A and MAP1B proteins.,tissue specificity:Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.,

Background	MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. The protein encoded by this gene is one of the light chain subunits and can associate with either MAP1A or MAP1B. Two transcript variants encoding different isoforms have been found for this gene. The expression of variant 1 is suppressed in many tumor cell lines, suggesting that may be involved in carcinogenesis. [provided by RefSeq, Feb 2012],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

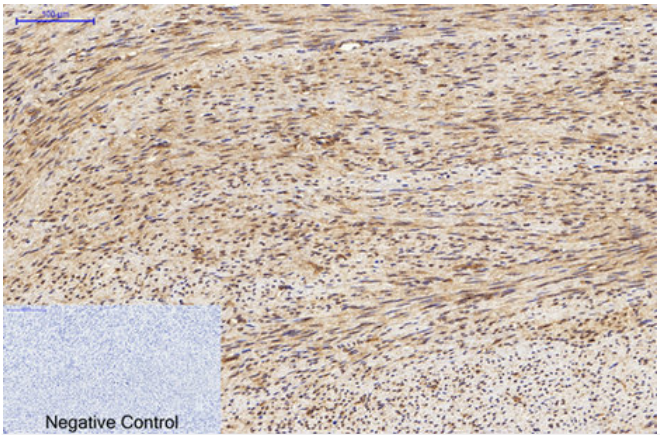
Products Images



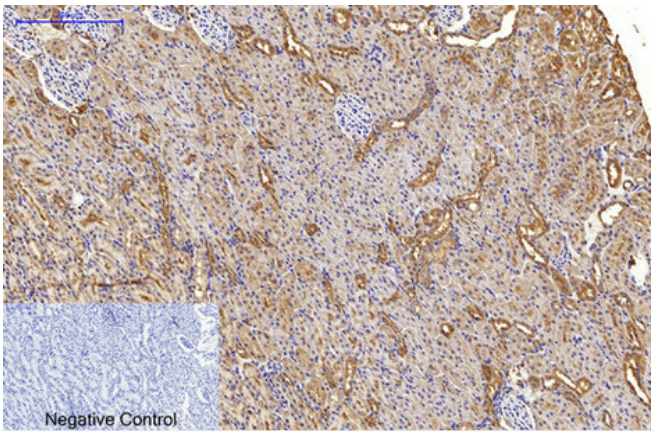
Immunofluorescence analysis of Hela cell. 1,CREB-1 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). LC3A mouse Monoclonal Antibody(5G10)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



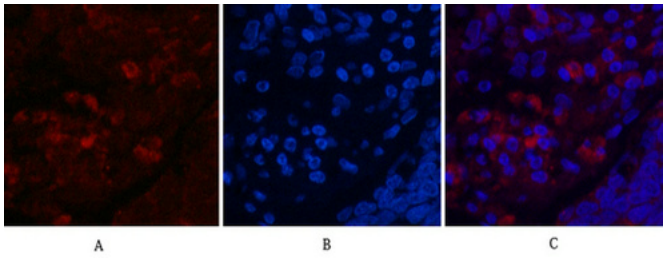
Western blot analysis of lysates from 1) Hela Cell Lysate, 2) 3T3 Cell Lysate, 3) Rat Brain Tissue cells, (Green) primary antibody was diluted at 1:1000, 4°over night, Dylight 800 secondary antibody(Immunoway:RS23910)was diluted at 1:10000, 37° 1hour. (Red) Actin β Polyclonal Antibody (Immunoway:YT0099) antibody was diluted at 1:5000 as loading control, 4° over night,Dylight 680 secondary antibody(Immunoway:RS23720)was diluted at 1:10000, 37° 1hour.



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,LC3A Mouse Monoclonal Antibody(5G10) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,LC3A Mouse Monoclonal Antibody(5G10) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-lung-cancer tissue. 1,LC3A Mouse Monoclonal Antibody(5G10)(red) was diluted at 1:200(4° C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B