10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LC3A mouse Monoclonal Antibody(5G10)

Catalog # AP63762

Specification

LC3A mouse Monoclonal Antibody(5G10) - Product Information

Application	**WB, IHC-P, IF**
Primary Accession	Q9H492
Reactivity	**Human, Rat, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**

LC3A mouse Monoclonal Antibody(5G10) - Additional Information

Gene ID 84557

Other Names
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)

Dilution
WB~~WB 1:1000-2000, IHC 1:100-200 IF 1:200
IHC-P~~N/A
IF~~WB 1:1000-2000, IHC 1:100-200 IF 1:200

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

LC3A mouse Monoclonal Antibody(5G10) - Protein Information

Name MAP1LC3A

Function
Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:20713600, PubMed:24290141). While LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:20713600). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:31006537, PubMed:31006538).

Cellular Location
Cytoplasmic vesicle, autophagosome membrane; Lipid-anchor. Endomembrane system; Lipid-anchor. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91VR7}. Note=LC3-II binds to the autophagic membranes.

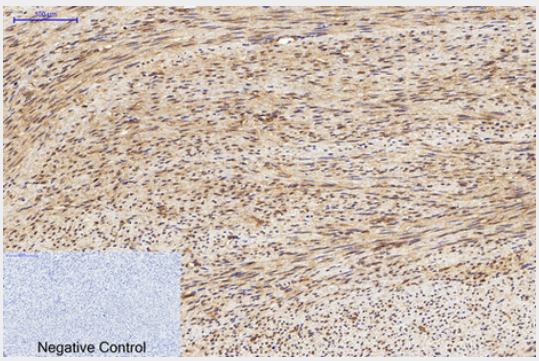
Tissue Location
Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes

LC3A mouse Monoclonal Antibody(5G10) - Protocols

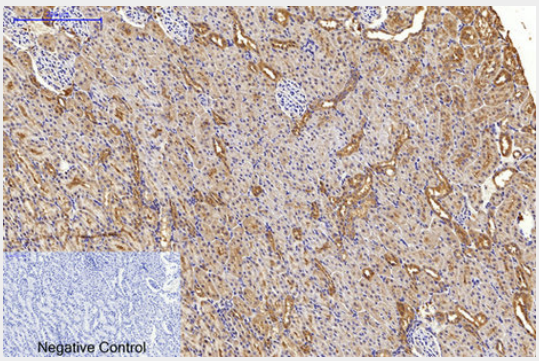
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LC3A mouse Monoclonal Antibody(5G10) - Images

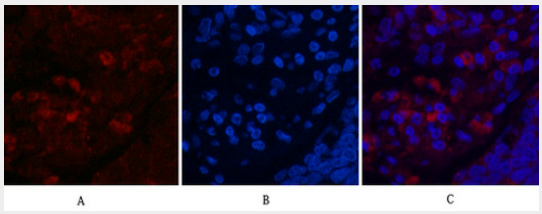


Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,LC3A Mouse Monoclonal Antibody(5G10) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control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

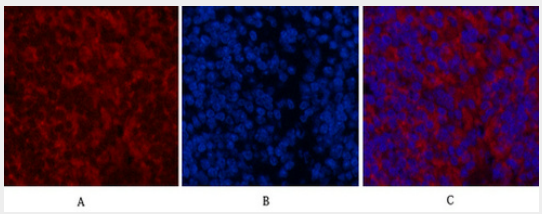


Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,LC3A Mouse Monoclonal Antibody(5G10) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was

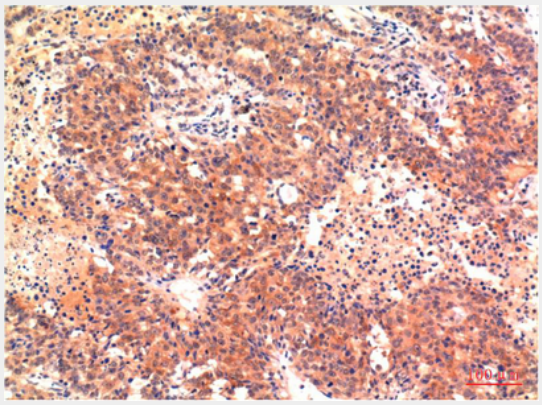
used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



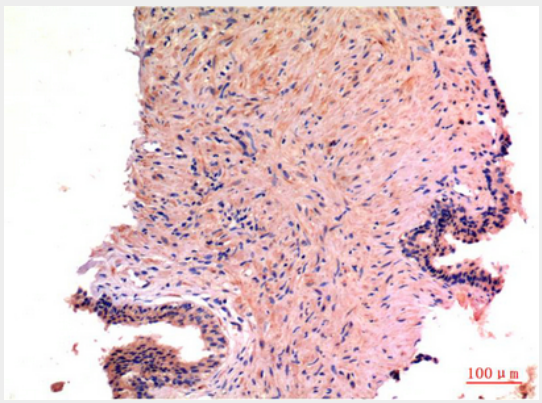
Immunofluorescence analysis of Human-lung-cancer tissue. 1,LC3A Mouse Monoclonal Antibody(5G10)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge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



Immunofluorescence analysis of Mouse-spleen 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



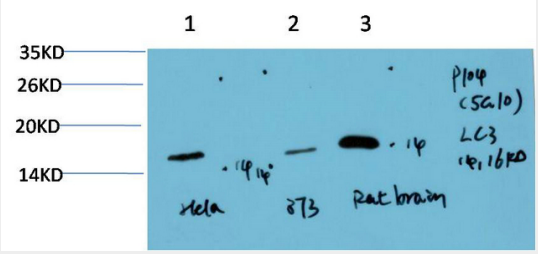
Immunohistochemical analysis of paraffin-embedded Human Heptacarcinoma Tissue using LC3A Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Prostate Carcinoma Tissue using

10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LC3A Mouse mAb diluted at 1:200.



Western blot analysis of 1) Hela Cell Lysate, 2) 3T3 Cell Lysate, 3) Rat Brain Tissue Lysate using LC3A Mouse mAb diluted at 1:1000.

LC3A mouse Monoclonal Antibody(5G10) - Background

Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes) (PubMed:20713600, PubMed:24290141). Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed:20713600).