

Product datasheet

Alexa Fluor® 555 Anti-LC3B - Autophagosome Marker antibody [EPR18709] ab307768

Recombinant RCDMAD

5 Images

| Overview | |
|---------------------|--|
| Product name | Alexa Fluor® 555 Anti-LC3B - Autophagosome Marker antibody [EPR18709] |
| Description | Alexa Fluor® 555 Rabbit monoclonal [EPR18709] to LC3B - Autophagosome Marker |
| Host species | Rabbit |
| Conjugation | Alexa Fluor® 555. Ex: 555nm, Em: 565nm |
| Tested applications | Suitable for: ICC/IF, IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | IHC-P: Human cerebrum and glioma tissue. ICC/IF: Chloroquine treated HeLa cells. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>. Alexa Fluor[®] is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor[®] dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor[®] dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor[®] dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com. |

| Properties | |
|----------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Store In the Dark. |
| Storage buffer | pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, 68.98% PBS |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR18709 |
| lsotype | lgG |

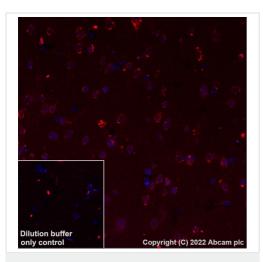
Applications

The Abpromise guaranteeOur Abpromise guaranteecovers the use of ab307768 in the following tested applications.The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|--------|
| ICC/IF | | 1/50. |
| IHC-P | | 1/100. |

Target

| Function | Probably involved in formation of autophagosomal vacuoles (autophagosomes). |
|----------------------------------|---|
| Tissue specificity | Most abundant in heart, brain, skeletal muscle and testis. Little expression observed in liver. |
| Sequence similarities | Belongs to the MAP1 LC3 family. |
| Post-translational modifications | The precursor molecule is cleaved by APG4B/ATG4B to form LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form LC3-II. |
| Cellular localization | Cytoplasm > cytoskeleton. Endomembrane system. Cytoplasmic vesicle > autophagosome membrane. LC3-II binds to the autophagic membranes. |

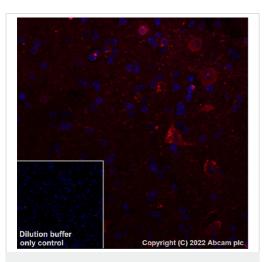


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Alexa Fluor® 555 Anti-LC3B -Autophagosome Marker antibody [EPR18709] (ab307768)

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling LC3B with ab307768 at 1/100 dilution (5.0 μ g/ml).

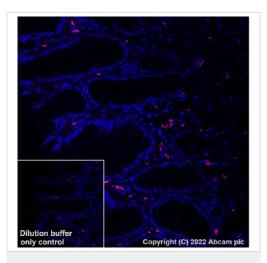
Cytoplasmic staining on human cerebrum.

The section was incubated with ab307768 at 4°C overnight (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Alexa Fluor® 555 Anti-LC3B -Autophagosome Marker antibody [EPR18709] (ab307768) Immunohistochemical analysis of paraffin-embedded human glioma tissue labeling LC3B with ab307768 at 1/100 dilution (5.0 μ g/ml). Cytoplasmic staining on human glioma.

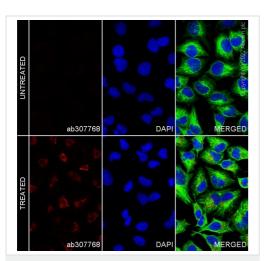
The section was incubated with ab307768 at 4°C overnight (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Alexa Fluor® 555 Anti-LC3B -Autophagosome Marker antibody [EPR18709] (ab307768) Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling LC3B with ab307768 at 1/100 dilution (5.0 μ g/ml).

Negative control: no staining on human stomach.

The section was incubated with ab307768 at 4°C overnight (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0).

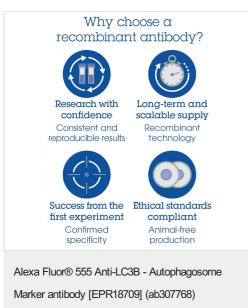


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-LC3B - Autophagosome Marker antibody [EPR18709] (ab307768)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical adenocarcinoma epithelial cell) cells labeling LC3B with ab307768 at 1/50 dilution (10 μg/ml) (Red).

Confocal image showing increased cytoplasmic staining in HeLa cells treated with Chloroquine ($50\mu M$) for 24 hours.

<u>ab195887</u> Anti-alpha Tubulin mouse monoclonal antibody -Microtubule Marker (Alexa Fluor® 488) was used to counterstain tubulin at 1/200 dilution (2.5 µg/ml) (Green). The nuclear counterstain was DAPI (Blue).



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