abcam

ab245911

Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP16602
Purification technique	Affinity purification Protein A
Specificity	Binds K27ac alone and also when S28 is phosphorylated.
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	-

Species	Mouse
Dilution info	1/100
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/200
Notes	This product gave a positive signal in Trichostatin A (500ng/ml 4h) treated HeLa fixed with 4% formaldehyde (10 min).

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information H3C1 acetyl K27

Function	Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

Storage

Shipped at conditions	Blue Ice

Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Stable for 12 months at -20°C, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

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Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

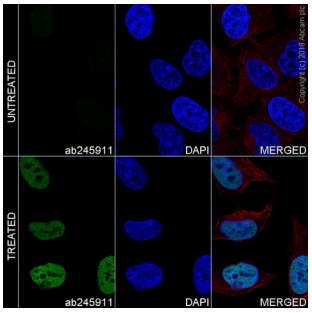
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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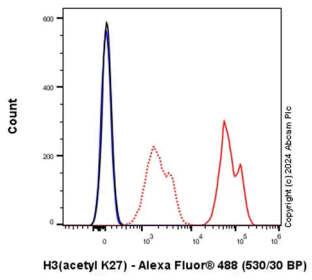
7 product images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

Histone H3 (acetyl K27) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Histone H3 (acetyl K27) antibody

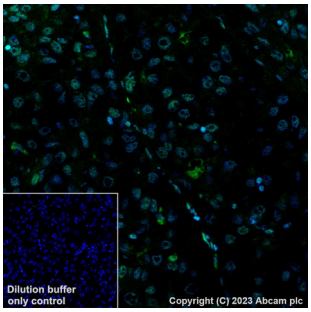
ab245911 staining Histone H3 (acetyl K27) in HeLa +/- Trichostatin A (500 ng/ml for 4h). The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab245911 at 1/200 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor®594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).



Flow Cytometry - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

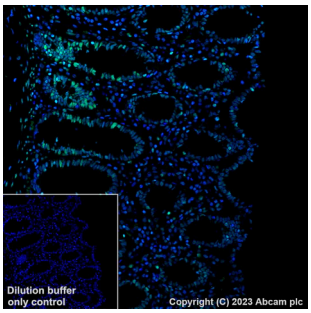
Histone H3 (acetyl K27) Flow Cytometry staining using rabbit Anti-Histone H3 (acetyl K27) antibody

Flow Cytometry analysis of HeLa (human cervical adenocarcinoma epithelial cell) treated with 500ng/mL TSA for 4 hours (Red) / Untreated HeLa (Dotted Red) cells labeling Histone H3 (acetyl K27) with ab245911 at 1/50 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. ab199091 was used as isotype control (black). Unlabelled control/colour: Cells without incubation with primary antibody and secondary antibody (blue).



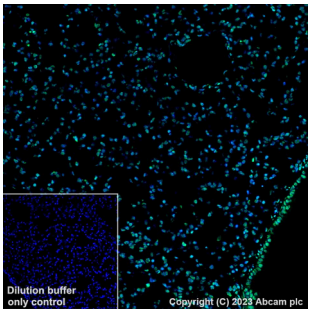
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

Immunohistochemistry analysis of paraffin-embedded sections human liver cancer labeling Histone H3 (acetyl K27) with ab245911 at 1/100 dilution, incubated with ab245911 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 40 mins. Nuclear staining on human liver cancer.



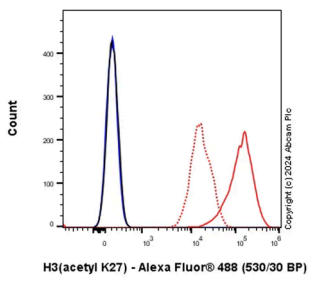
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

Immunohistochemistry analysis of paraffin-embedded sections human colon labeling Histone H3 (acetyl K27) with ab245911 at 1/100 dilution, incubated with ab245911 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 40 mins. Nuclear staining on human colon.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

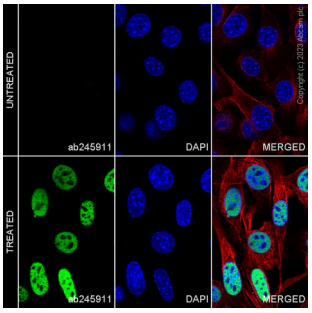
Immunohistochemistry analysis of paraffin-embedded sections mouse lung labeling Histone H3 (acetyl K27) with ab245911 at 1/100 dilution, incubated with ab245911 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 40 mins. Nuclear staining on mouse lung.



Flow Cytometry - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

Histone H3 (acetyl K27) Flow Cytometry staining using rabbit Anti-Histone H3 (acetyl K27) antibody

Flow Cytometry analysis of NIH/3T3 (mouse embryonic fibroblast) treated with 500ng/mL TSA for 4 hours (Red) / Untreated NIH/3T3 (Dotted Red) cells labeling Histone H3 (acetyl K27) with ab245911 at 1/50 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. ab199091 was used as isotype control (black). Unlabelled control/colour: Cells without incubation with primary antibody and secondary antibody (blue).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Histone H3 (acetyl K27) antibody [EP16602] (ab245911)

Histone H3 (acetyl K27) Immunocytochemistry/ Immunofluorescence staining of NIH/3T3 (mouse embryonic fibroblast) cells treated with Trichostatin A (500 ng/ml for 4h) using rabbit Anti-Histone H3 (acetyl K27) antibody

ab245911 at 1/500 staining Histone H3 (acetyl K27) in NIH/3T3 (mouse embryonic fibroblast) followed by ab150081 at 1/1000 dilution. The cells were fixed with 4% formaldehyde and permeabilized with 0.1% Triton X-100. ab195889 at 1/200 was used as the counterstain antibody. Nuclear DNA was labelled with DAPI (shown in blue). Confocal image showing nuclear staining in NIH/3T3 cells treated with Trichostatin A (500 ng/ml for 4h) (shown in green). The counterstain was observed with red. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.