abcam

ab247494

Anti-Histone H3 (phospho T3) antibody [EP1702Y] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP1702Y
Purification technique	Affinity purification Protein A
Specificity	This antibody detects Histone H3 phosphorylated at Theronine 3. Species cross reactivity was determined by western blot only. No signal was detected in the following Mouse and Rat tissues lysates: brain, heart, kidney, and spleen.
Concentration	1.033 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information H3C1 phospho T3

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 conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab247494 is the carrier-free version of ab78351.

Species reactivity

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

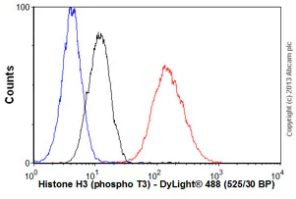
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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4 product images

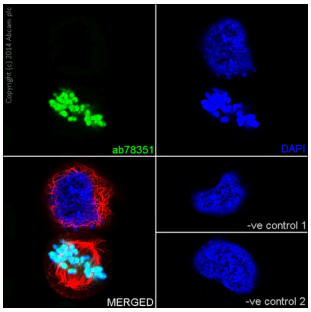


Flow Cytometry (Intracellular) - Anti-Histone H3 (phospho T3) antibody [EP1702Y] - BSA and Azide free (ab247494)

Histone H3 (phospho T3) Flow Cytometry (Intracellular) staining using rabbit Anti-Histone H3 (phospho T3) antibody

This data was developed using ab78351, the same antibody clone in a different buffer formulation.

Overlay histogram showing HeLa cells stained with ab78351 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab78351, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was a goat anti-rabbit DyLight® 488 (IgG; H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

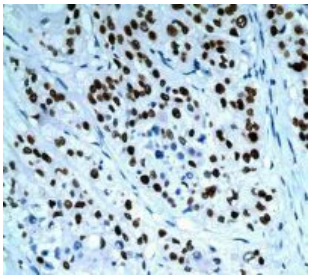


Immunocytochemistry/ Immunofluorescence - Anti-Histone H3 (phospho T3) antibody [EP1702Y] - BSA and Azide free (ab247494)

Histone H3 (phospho T3) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Histone H3 (phospho T3) antibody

This data was developed using the same antibody clone in a different buffer formulation (ab78351).
Immunocytochemistry analysis of HeLa (human cervix adenocarcinoma epithelial cell) labeling Histone H3 with purified ab78351 at 1/250 dilution. Cells were fixed with 4% Paraformaldehyde

and permeabilised with 0.1% tritonX-100. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/1000 (2 µg/ml) was used as the secondary antibody. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.18 µg/ml) was used as counterstain. Nuclei were stained blue with DAPI.
Negative control: PBS instead of the primary antibody.

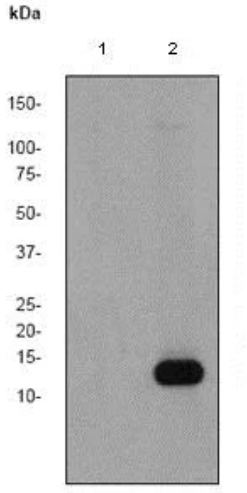


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Histone H3 (phospho T3) antibody [EP1702Y] - BSA and Azide free (ab247494)

Histone H3 (phospho T3) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Histone H3 (phospho T3) antibody

This data was developed using ab78351, the same antibody clone in a different buffer formulation. ab78351 at 1/100 dilution staining Histone H3 in human breast carcinoma tissue, using a HRP/AP polymerized secondary antibody.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Western blot - Anti-Histone H3 (phospho T3) antibody [EP1702Y] - BSA and Azide free (ab247494)

This data was developed using ab78351, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-Histone H3 (phospho T3) antibody [EP1702Y] (ab78351) at 1/500000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
HeLa cell lysate treated with FBS + Calyculin A. at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 15 kDa

Observed band size: 14 kDa

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