Rabbit anti Histone H3 (Citrulline at N-term) Polyclonal Antibody

Alternative Name(s): HIST1H3A

Order Information

- **Description:** Histone H3 (Citrulline at N-term)
- **Catalogue:** 630-180
- **Lot:** See label
- **Size:** 100 ug/200 ul
- **Host:** Rabbit
- **Clone:** nan
- **Application:** ELISA, WB, IHC
- **Cross Reactivity:** Hu, Rt, Ms, Bv, Ck

ANTIGEN PREPARATION

A synthetic peptide containing N-terminus of human histone H3 with citrulline modification at 2/8/17.

BACKGROUND

Histones are basic nuclear proteins that together with DNA make up the nucleosome structure in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The Histone 3 citrillination occurs by enzymatic conversion of arginine residue to citrulline. This leads to chromatin relaxation and enables activation of transcription. H3 citrullinations in different arginines plays a central role in release of chromatin from neutrophil extracellular traps (NETs), which have been shown to promote tumor progression and metastasis. It is important in diagnosis, prognosis and therapeutics of cancer and autoimmune disease. This antibody is specific for histone H3 Citrillination at R2, R8 and/or R17.

PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

FORMULATION

This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2) containing antibody stabilizer.

SPECIFICITY

This antibody only recognizes ~ 17 kDa of Dimethylated Histone H3 at K27. It does not cross react to non-methylated H3 or mono-, Tri-methylated Histone H3.

STORAGE

The antibodies are stable for 12 months from date of receipt when stored at –20oC. The antibodies can be stored at 2oC-8oC for one month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: 5-10 µg/ml
- MW (kDa): 17 kDa
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

*Optimal dilutions should be determined by researchers for the specific applications.

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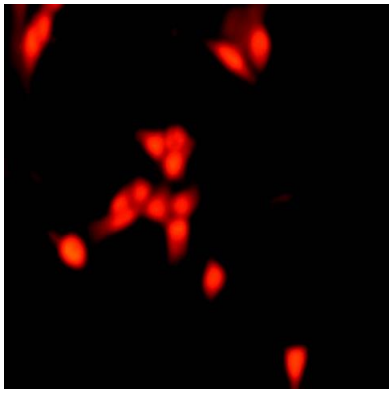
DATA ATTACHMENTS



ImmunoFluorescent Chemistry: Serum-depleted 3T3 cells were cultured in chamber, and fixed onto slide followed by incubation with 5 ug/ml Rabbit Anti-Citrullinated Histone H3 (R2+R8+R17) antibody, (Cat# 630-180), followed by then Rhodamine labeled Goat anti Rabbit IgG for visualization under fluorescent microscope.

REFERENCES

Vakoc C et al. Histone H3 Lysine 9 Methylation and HP1γ Are Associated with Transcription Elongation through Mammalian Chromatin . Molecular Cell (2003), Volume 19 , Issue 3 , Pages 381 – 391.

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