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## CoraLite®594-conjugated Phospho-Histone H2A.X (Ser139) Recombinant monoclonal antibody



Catalog Number: CL594-83307-2

**Basic Information** 

Catalog Number: GenBank Accession Number: BC013416

CL594-83307-2 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 3014

Nanodrop: **UNIPROT ID:** 

Source: P16104 Rabbit Full Name:

Isotype: H2A histone family, member X IgG

Calculated MW:

15 kDa Observed MW: 15 kDa

5N19 Recommended Dilutions:

**Purification Method:** 

Protein A purification

CloneNo.:

FC (Intra): 0.13 ug per 10^6 cells in a

100 ul suspension

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity:

human

Positive Controls:

FC (Intra): Staurosporine treated Jurkat cells,

## **Background Information**

The histone variant H2AX is a major component of the DNA damage response (DDR), especially functioning in amplifying DNA damage signals. In response to DNA double-strand breaks (DSBs), H2AX is instantaneously phosphorylated at Ser139 (a form called cH2AX) by the kinases ATM and ATR. The phosphorylation of H2AX at Ser139, resulting in the formation of gamma-H2AX puncta in the nuclei, is an early event in the cellular response to DNA damage. Therefore, phospho-Histone H2A. X (Ser139) is also known as y H2AX. The phosphorylation site of H2AX, Ser139, has also been described as Ser140 in other literature, and they recognize the same amino acid site. (PMID: 22908299, PMID: 30106130, PMID:22941631)

Storage

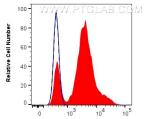
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



CL594-83307-2 Phospho-Histone H2A.X(Ser139)

1x10^6 Jurkat cells untreated (dashed lines) or treated with Staurosporine which intracellularly stained with 0.13 ug Coralite®594 Phospho-Histone H2a.X (Ser139) Recombinant Antibody (CL594-83307-2, Clone:5N19)(red), or 0.13 ug Coralite®594 Rabbit IgG Isotype Control RecAb (CL594-98136, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Flow Cytometry Phosphorylated Protein Fixation/Permeabilization Kit (PF00026).