Data Sheet (Cat.No.TMAC-03223)

Anti-Phospho-H2AFX (Ser139) Antibody (2B111)

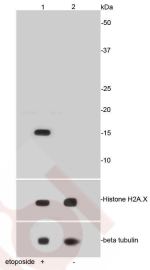
Product Details

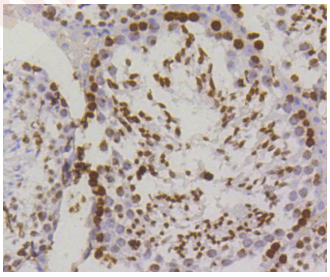
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 15 kDa.
Clone:	2B111
Purification:	ProA affinity purified

Applications

Verified Activity:

1. Western blot analysis of Phospho-Histone H2A.X (S139) on HepG2 cell lysates using anti-Phospho-Histone H2A.X (S139) antibody at 1/1,000 dilution. Positive control: Lane 1: HepG2 cell lysate treated with etoposide, Lane 2: HepG2 cell lysate untreated.
2. Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-Phospho-Histone H2A.X (S139) antibody. Counter stained with hematoxylin.





Application:	ICC/IF,IHC,IP,WB
Recommended	WB: 1:1000-5000; IHC: 1:100-200; ICC/IF: 1:50-200; IP: 1:20-50

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthesized phosphopeptide: human Histone H2A.X around the phosphorylation site of Ser139
Antigen Species:	Human
Uniprot ID:	P16104
Synonyms:	H2AFX (p-S139);p-H2AFX (S139);H2AFX (p-Ser139);p-H2AFX (Ser139)

Research Background

Histone H2A.X is a member of the Histone H2A family, which is involved in nucleosomal organization of chromatin. The H2AFX gene is located in close proximity to the Porphobilinogen deaminase (PBG-D) gene in both mouse and human, and maps to chromosome 9 and 11q23, respectively. H2A.X differs from the other members of the H2A family by the presence of a highly conserved C-terminal motif. It is rapidly phosphorylated in response to ionizing radiation and plays an important role in the recognition and repair of DNA double stranded breaks. The phosphorylated form of H2A.X, designated ?-H2A.X, forms nuclear foci at the heavy chain constant region of cells involved in class switch recombination (CSR), a region-specific DNA reaction that replaces one immunoglobulin heavy chain constant region gene with another. The phosphorylated ?-H2A.X is also thought to initiate subsequent repair factors, including Rad50, Rad51 and BRCA1.