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H2AFX Antibody (monoclonal) (M17)

Mouse monoclonal antibody raised against a partial recombinant H2AFX.
Catalog # AT2307a

Product Information

Application	E
Primary Accession	P16104
Other Accession	BC011694
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2H5
Calculated MW	15145

Additional Information

Gene ID	3014
Other Names	Histone H2AX, H2a/x, Histone H2AX, H2AFX, H2AX
Target/Specificity	H2AFX (AAH11694.1, 1 a.a. ~ 96 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	H2AFX Antibody (monoclonal) (M17) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a member of the histone H2A family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif.

References

Differences in the kinetics of gamma-H2AX fluorescence decay after exposure to low and high LET radiation. Schmid TE, et al. Int J Radiat Biol, 2010 Aug. PMID 20569192.Acetylation of H2AX on lysine 36 plays a key role in the DNA double-strand break repair pathway. Jiang X, et al. FEBS Lett, 2010 Jul 2. PMID 20488183.H2AX phosphorylation screen of cells from radiosensitive cancer patients reveals a novel DNA double-strand break repair cellular phenotype. Vasireddy RS, et al. Br J Cancer, 2010 May 11. PMID 20461094.High-resolution profiling of gammaH2AX around DNA double strand breaks in the mammalian genome. Iacovoni JS, et al. EMBO J, 2010 Apr 21. PMID 20360682.Phosphorylation of histone H2A.X by DNA-dependent protein kinase is not affected by core histone acetylation, but it alters nucleosome stability and histone H1 binding. Li A, et al. J Biol Chem, 2010 Jun 4. PMID 20356835.

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