

Product datasheet for **TA319154**

Histone H2A.X (H2AFX) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:5,000, WB: 1:1,000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Anti-H2AX pS139 purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a phosphorylated synthetic peptide corresponding to the C-terminal region containing serine 139 of human H2AX protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	H2A histone family member X
Database Link:	NP_002096 Entrez Gene 3014 Human P16104
Synonyms:	H2A; H2A.X; H2AX; X



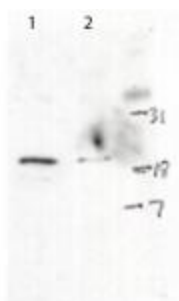
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Note: Histones play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA is wrapped around histone-groups, consisting of the core histones H2A, H2B, H3 and H4. As a reaction on DNA Double-strand breaks (DSB) H2AX becomes phosphorylated on serine 139, called gamma-H2AX. ATM, ATR and PRKDCs, kinases of the PI3-family, are responsible for this phosphorylation. The modification can happen accidentally during replication fork collapse, exogenous genotoxic agents, may also occur during meiotic recombination events and immunoglobulin class switching in lymphocytes, in the response to ionizing radiation but also during controlled physiological processes such as V(D)J recombination. Mutagenesis experiments have shown that the modification is necessary for the proper formation of ionizing radiation induced foci in response to double strand breaks, but is not required for the recruitment of proteins to the site of DSBs. Gamma-H2AX is a sensitive target for looking at DSBs in cells. Dephosphorylation of Ser-140 by PP2A is required for DNA DSB repair. The role of the phosphorylated form of the histone in DNA repair is under. Anti-H2AX pS139 is ideal for researched interested in Histones, DNA Damage and Repair, and Epigenetics.

Protein Families: Druggable Genome

Protein Pathways: Systemic lupus erythematosus

Product images:



Western Blot of Rabbit anti-H2AXpS139 antibody. Lane 1: HeLa Lysate stimulated with adriamycin (24 hr). Lane 2: HeLa Lysate unstimulated. Load: 35 ug per lane. Primary antibody: H2AXpS139 antibody at 1:1000 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 15.1 kDa, ~18 kDa for H2AXpS139. Other band (s): none.