

PRODUCT NAME		
HeLa cell line stably expressing FLAG-HA tagged histone H2A.X		
Cat. No. C18010005		Format: 1 ml
Lot #: 001	Source: Human	Concentration: 10 ⁶ cells/ml

Description: HeLa Cell line stably expressing N-terminal FLAG-HA tagged human histone H2A.X.

Specificity: Human

Storage: Store in liquid nitrogen.

Doubling time: Approximately 20 h in the linear part of the growth curve

Guarantee: Certified mycoplasma free as determined by DNA staining and direct culture methods. Stable expression over multiple cell passages was confirmed.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

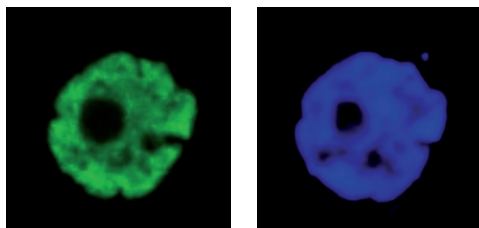
Last data sheet update: September 11, 2015

Protein description

Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histone tails undergo numerous post-translational modifications, which either directly or indirectly alter chromatin structure to facilitate transcriptional activation or repression or other nuclear processes. The histone variant H2A.X replaces conventional H2A in a subset of nucleosomes. H2A.X plays a central role in DNA repair and chromosomal stability and is required for cell cycle progression arrest in response to low doses of ionizing radiation and for efficient repair of DNA double strand breaks.

Quality control

Figure 1



Expression of the N-terminal FLAG-HA tagged human histone H2A.X is confirmed by immunofluorescence analysis with an antibody against the HA-tag (left figure). The right figure shows staining of the nucleus with DAPI.