

| PRODUCT NAME | | |
|---|---------------|---|
| HeLa cell line stably expressing FLAG-HA tagged histone variant macroH2A1.1 | | |
| Cat. No. C18010009 | | 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 variant macroH2A1.1.

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.

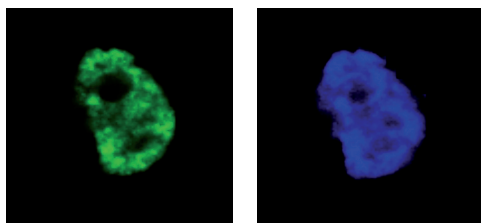
Last data sheet update: September 11, 2015

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 macroH2A1.1 replaces conventional H2A in a subset of nucleosomes where it represses transcription. macroH2a1.1 is also involved in stable X chromosome inactivation. It inhibits the binding of transcription factors and histone acetylation by EP300 and recruits class I HDACs, which induces a hypoacetylated state of chromatin.

Quality control

Figure 1



Expression of the N-terminal FLAG-HA tagged human histone variant macroH2A1.1 is confirmed by immunofluorescence analysis with an antibody against the HA-tag (left figure). The right figure shows staining of the nucleus with DAPI.