

Alexa Fluor® 647 anti-Histone H3-Phosphorylated (Ser28)

Catalog # / Size: 3805030 / 100 tests
3805025 / 25 tests

Clone: HTA28

Isotype: Rat IgG2a, κ

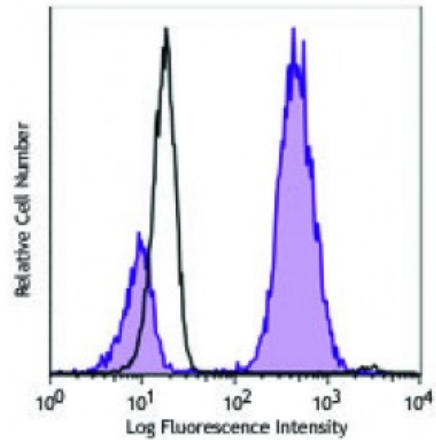
Immunogen: Synthetic peptide conjugated to KLH, corresponding to amino acids 23-35 of human histone H3.

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



HELA cells (open histogram) and HELA cells treated with Nocodazole for 24 hours (filled histogram), were fixed, permeabilized, and then stained with Histone H3-Phosphorylated (Ser28) (clone HTA28) Alexa Fluor® 647.

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent intracellular staining with flow cytometric analysis. Please follow the Cell Fixation and Permeabilization Protocol Using 70% Ethanol. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

Application References:

- Hirata A, et al. 2004. *J. Histochem. Cytochem.* 52:1503.
- Goto H, et al. 1999. *J. Biol. Chem.* 274:25543.
- Ozawa K. 2008. *Cytometry A* 73:517.
- Goode NJ, et al. 2014. *PLoS Genet.* 10:1004323. [PubMed](#)

Description: H3 is a core component of the nucleosome that serves to wrap and compact DNA into chromatin. Histones therefore, limit the accessibility of DNA, providing mechanisms for transcription regulation, DNA repair and replication and chromosomal stability. During mitosis, H3 is phosphorylated at serine 28. This phosphorylation coincides with chromosome condensation initiated at prophase and disappears at late anaphase. H3 has been demonstrated to be phosphorylated by the action of MLTK-α (mixed lineage kinase-like mitogen activated protein triple kinase α) in response to ultraviolet B light and epidermal growth factor, as well as Aurora-B during mitosis.

Antigen References:

- Choi HS, et al. 2005. *J. Biol. Chem.* 280:13545.
- Goto H, et al. 2002. *Genes Cells* 7:11.
- Garcia BA, et al. 2005. *Biochemistry* 44:13202.