Product Data Sheet

PerCP/Cy5.5 anti-Histone H3-Phosphorylated (Ser28)

Catalog # / Size: 3805070 / 100 tests

3805065 / 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 PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

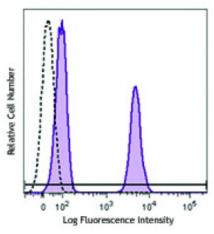
antibody.

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 anti-Histone H3-Phosphorylated (Ser28) (clone HTA28) PerCP/Cy5.5.

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by intracellular

immunofluorescent staining with flow cytometric analysis. 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.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of

690 nm.

Application References:

1. Hirata A, et al. 2004. J. Histochem. Cytochem. 52:1503.

2. Goto H, et al. 1999. J. Biol. Chem. 274:25543.

3. Ozawa K. 2008. Cytometry A 73:517.

3. 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 linage 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:

1. Choi HS, et al. 2005. J. Biol. Chem. 280:13545.

2. Goto H, et al. 2002. Genes Cells 7:11.

3. Garcia BA, et al. 2005. Biochemistry 44:13202.