PRODUCT INFORMATION



Histone H3 Polyclonal Antibody

Item No. 13781

Overview and Properties

Contents: This vial contains Protein A-purified IgG at 1 mg/ml.

Immunogen: Recombinant Histone H3 Protein

Cross Reactivity: (-) H2A, H2B, and H4 Species Reactivity: (+) Human H3

P68431 **Uniprot No.:** Form: Liquid

-20°C (as supplied) Storage:

Stability: As supplied, ≥1 year from the QC date provided on the Certificate of Analysis, when

stored properly

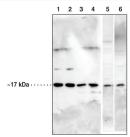
Storage Buffer: PBS, pH 7.2, containing 50% glycerol with 0.1% BSA and 0.02% sodium azide

Rabbit Host:

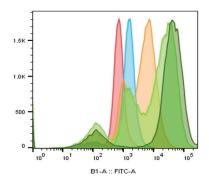
Applications: ELISA, Flow Cytometry (FC), Immunoprecipitation (IP), and Western blot (WB); the

> recommended starting dilution for ELISA and WB is 1:200, 1:1000 for FC, and 20 µg of antibody per test for IP. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image(s)



Lane 1: Recombinant Human Histone H3 (25ng) Lane 2: Recombinant Human Histone H3 (50ng) Lane 3: Core Histones (10ug) Lane 4: Core Histones (20ug) Lane 5: Raji Cell Lysates (50ug) Lane 6: A431 Cell Lysates (50µg)



ı	Sample Name	Subset Name		
I	2017-06-26A1.0010.fcs			A1.010 – HeLa H3 (10 μg)
ı	2017-06-26A1.0009.fcs			A1.009 – HeLa H3 (5 μg)
I	2017-06-26A1.0008.fcs	Ungated	41028	A1.008 – HeLa H3 (1 μg)
	2017-06-26A1.0007.fcs		46290	A1.007 – HeLa Secondary Alon
ı	2017-06-26A1.0006.fcs	Ungated	39048	A1 006 - Hela PBS

Flow Cytometry: HeLa cells were PFA fixed and permeabilized followed by a fetal bovine serum block. Cells were probed with the indicated antibody and analyzed using a Miltenyi MACSQuant Analyzer.

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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Description

A nucleosome is the basic repeating unit of chromatin in which 146 base pairs of DNA wrap twice around a histone octamer consisting of two copies of each of the core histones, H2A, H2B, H3, and H4.¹ The combination of two H2A/H2B dimers and one H3/H4 tetramer create the nucleosome core.² Histone H3 undergoes many modifications which include acetylation, methylation, and phosphorylation that are important for regulation of gene transcription.¹ Predicted size of Histone H3 is 15.5 kDa and Cayman's Histone H3 monoclonal antibody detects a band at ~17 kDa by Western blot.

References

- 1. Bhaumik, S.R., Smith, E. and Shilatifard, A. Covalent modifications of histones during development and disease pathogenesis. *Nat. Struct. Mol. Biol.* **14(11)**, 1008-1016 (2007).
- 2. Tanaka, Y., Tawaramoto-Sasanuma, M., Kawaguchi, S., et al. Expression and purification of recombinant human histones. *Methods* **33**, 3-11 (2004).

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