

**Histone H3.3 Phospho (pS28 & 31)
Rabbit Monoclonal Antibody Product Data Sheet**

Catalog # 2230-1

Clone ID: EP1874Y **Lot #:** Please refer to the vial
Quantity: 100 µl
Type: Rabbit Monoclonal IgG
Species Cross-reactivity*: Human Mouse Rat
Applications: WB IHC ICC Flow Cytometry IP
Molecular Wt.: 17 kDa
UniProt ID: P84243

*Species cross-reactivity is based on WB analysis

Background: Changes in chromatin structure play a large role in the regulation of transcription in eukaryotes (1). The nucleosome is the primary building block of chromatin, and is made up of four core histone proteins (H2A, H2B, H3 and H4) (2). Various post-translational modifications, such as acetylation and methylation, of core histones serve as regulators of gene expression (2). Histone H3.3 is a variant histone which replaces conventional H3 in nucleosomes in active genes. It is predominant from of histone H3 in non-dividing cells and it is incorporated into chromatin independently of DNA synthesis. H3.3 is phosphorylated at serine 28 by MLTK isoform 1, RPS6KA5, and AURKB during mitosis. Also, phosphorylation at serine 31 on H3.3 is specific to regions bordering centromeres in metaphase chromosomes.

Specificity: A synthetic phospho-peptide corresponding to residues surrounding serine 28 and serine 31 of human Histone H3.3 protein.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:2000 – 5000

Please visit www.epitomics.com for recommended protocols

Background References:

1. Braunstein M, et al. *Mol. Cell. Biol.* 16:4349–56, 1996
2. Workman JL, et al. *Annu. Rev. Biochem.* 67: 545–579, 1998
3. Cheung, P. et al. *Cell* 103, 263–27, 2000
4. Xiao T, et al. *Mol Cell Bio* 25:637-651, 2005
5. Albig W, et al. *Hum Genet* 97:486-491. 1996

Related Products:

Antigen	Clone	Catalog
Histone H3	E173-58	1326-1
Histone H3 (pT3)	EP1702Y	2162-1
Histone H3 (K18)	EP959Y	1766-1
Histone H3 (K56)	EPR996Y	2134-1

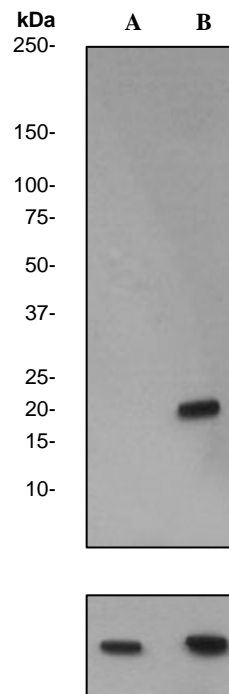


Fig 1. Western blot analysis on HeLa cell lysates using anti-Phospho-Histone H3.3 (pS28 & S31) RabMAb (cat. #2230-1), 1:5000 dilution. Cells were either (A) untreated (B) treated with HeLa+FBS +calyculin A

Product QC'd by: _____

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under US Patents No. 5,675,063 and 5,599,681. For a complete list of protocols and available related products, please visit www.epitomics.com.