



# Rabbit Anti-Human Histone H3 (Acetyl-Lys36) monoclonal antibody, clone SN265 (CABT-L1370)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                           |                                                                                                                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b>        | This antibody reacts to Histone H3 acetylated at Lysine 36 (K36ac), which is not affected by the phosphorylation of neighboring Ser31. No cross reactivity with other acetylated Lysines in histone H3. |
| <b>Target</b>             | Histone H3                                                                                                                                                                                              |
| <b>Immunogen</b>          | Acetyl-peptide corresponding to the Acetyl-Histone H3 (Lys36).                                                                                                                                          |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                     |
| <b>Source/Host</b>        | Rabbit                                                                                                                                                                                                  |
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                   |
| <b>Clone</b>              | SN265                                                                                                                                                                                                   |
| <b>Purification</b>       | Protein A Purified                                                                                                                                                                                      |
| <b>Conjugate</b>          | Unconjugated                                                                                                                                                                                            |
| <b>Applications</b>       | ELISA, ICC, IF, WB                                                                                                                                                                                      |
| <b>Format</b>             | Liquid                                                                                                                                                                                                  |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                 |
| <b>Buffer</b>             | PBS, pH 7.2-7.4, with 50% glycerol, 1% BSA                                                                                                                                                              |
| <b>Preservative</b>       | 0.09% Sodium Azide                                                                                                                                                                                      |

# BACKGROUND

**Introduction**

Histone H3 is one of the four core proteins of the nucleosome, and it is involved in transcription regulation, DNA repair, DNA replication and chromosomal stability. The N-terminal tail of Histone H3 undergoes many post-translational modifications, including phosphorylation, acetylation, multiple methylation, ubiquitination, and ADP-ribosylation to achieve its diverse functions. HistoneH3 is acetylated and deacetylated on N-terminal lysine residues. Acetylation removes the positive charge on the histone, decreasing the interaction with the negatively charged phosphate groups of DNA, and resulting in a more relaxed structure associated with greater levels of gene transcription. Acetylation of histone H3 at lysine 9 (H3K9Ac) is one of the most well-known epigenetic markers enriched in the promoter region of activated genes.

**Keywords**

HTR12;histone H3;CENH3;Centromeric histone CENH3;F6F3.17;F6F3\_17;Histone H3 like centromeric protein HTR12;HTR 12;Histone superfamily protein HTR12