



# Rabbit Anti-Human Histone H3 (Methyl-Lys4) monoclonal antibody, clone 2I5M42 (CABT-L1351)

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

## PRODUCT INFORMATION

|                           |  |
|---------------------------|--|
| <b>Specificity</b>        | This antibody may react with many other species.   |
| <b>Target</b>             | Histone H3   |
| <b>Immunogen</b>          | Methylated peptide (Lys4) corresponding to human Histone H3 (aa 2-11)                        |
| <b>Isotype</b>            | IgG  |
| <b>Source/Host</b>        | Rabbit   |
| <b>Species Reactivity</b> | Human  |
| <b>Clone</b>              | 2I5M42   |
| <b>Purification</b>       | Protein A Purified   |
| <b>Conjugate</b>          | Unconjugated   |
| <b>Applications</b>       | ICC, IF, WB  |
| <b>Format</b>             | Liquid   |
| <b>Concentration</b>      | 0.5 mg/ml  |
| <b>Buffer</b>             | PBS, pH 7.2  |
| <b>Preservative</b>       | 0.09% Sodium Azide   |
| <b>Storage</b>            | Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles. |

# BACKGROUND

## Introduction

Histone octamers are an essential component of the nucleosomal complex with key roles in chromatin packaging and target gene transcription. They undergo various post-translational modifications including methylation, acetylation and phosphorylation to facilitate chromatin regulation. These modifications in turn serve as epigenetic markers for transcriptional status of a gene and landing sites for transcriptional complexes. Methylation of histones is regulated by histone methyl transferases and histone demethylases. Monomethylation of Histone 3 on Lysine 4 (H3K4me1) is a chromatin mark associated with transcriptionally active regions of the chromatin enriched in the H3K27ac mark. It has also been implicated as a marker for 'poised' chromatin state of 'potentially' active genes where it overlaps with H3K27me3 modification.

## Keywords

HTR12;histone H3;CENH3;Centromeric histone CENH3;F6F3.17;F6F3\_17;Histone H3 like centromeric protein HTR12;HTR 12;Histone superfamily protein HTR12;FUNCTIONS IN: DNA binding;INVOLVED IN: double fertilization forming a zygote and endosperm;LOCAT