



# 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