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Datasheet for 200-401-P02

Histone H3 K4me1 Antibody

Overview

Description:	Anti-Histone H3 [Monomethyl Lys4] (RABBIT) Antibody - 200-401-P02
Item No.:	200-401-P02
Size:	100 µg
Applications:	Dot Blot, ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in a histone cluster on chromosome 1. This gene is one of four histone genes in the cluster that are duplicated; this record represents the telomeric copy. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics Research.
Synonyms:	rabbit anti-Anti-Histone H3 Monomethyl Lys4 antibody, rabbit anti-Histone H3 K4 me1 antibody, H3 K4me1, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3K4me1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HIST2H3C
Reactivity:	Human

PTM Specificity:	Methylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Histone H3 K4me1 Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic monomethylated peptide surrounding Lysine 4 of human Histone H3.2.
Purity/Specificity:	Anti-Histone H3 K4me1 Antibody was purified from monospecific antiserum by protein A affinity purification. This antibody reacts with human Histone H3.2. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and C. elegans. Predicted to react with many species including rat, chicken, Xenopus, Drosophila, and plant based on 100% sequence homology. Cross-reactivity with Histone H3 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q71DI3 • GeneID - 126961 • NCBI - NP_001005464.1

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Application Note:	Anti-Histone H3 [Monomethyl Lys4] antibody has been tested in ELISA, Dot blot, and Western Blot. Histone3 K4me1 is useful for Western Blot, Immunocytochemistry, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 protein by Western Blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	2-5µg/million cells
ELISA:	1:3,000 - 1:10,000
IF:	2 - 5 µg/ml
IHC:	2 - 5 µg/ml
IP:	2 mg/ml - 5 µg/ml
WB:	1:500 - 1:2,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot of Rabbit anti-Histone H3 K4Me1 antibody. Lane 1: Raji Whole Cell Lysate (p/n W09-001-368). Load: 35 µg per lane. Primary antibody: H3K4me1 antibody at 1:2000 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at 1:5,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~15kDa for Histone H3.

Disclaimer

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