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www.rockland.com
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+1 484.791.3823

Datasheet for 600-401-I76

Histone H3 phospho T11 Antibody

Overview

Description:	Anti-Histone H3 [p Thr11] (RABBIT) Antibody - 600-401-I76
Item No.:	600-401-I76
Size:	50 µg
Applications:	Dot Blot, IF, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Phosphorylation of H3 T11 is most abundant in the centromere, and initiates centromere assembly in mammalian cells. Dlk/ZIP kinase phosphorylates H3 T11, but may be affected by epigenetic modification itself during cellular interphase, which changes the rate of phosphorylation and de-phosphorylation of H3 T11. Other epigenetic modifiers also interact with H3 T11, including the histone acetyltransferase GCN5, which binds more readily to pT11 than unphosphorylated peptide. This binding affects downstream regulation of GCN5 genes and can contribute to transcriptional regulation. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.
Synonyms:	rabbit anti-Histone H3 pT11 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3pT11
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HIST2H3C
Reactivity:	Human
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Histone H3 [p Thr11] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phosphorylated peptide surrounding Threonine 11 of human Histone H3.2.
Purity/Specificity:	Anti-Histone H3 [p Thr11] was affinity purified from monospecific antiserum by immunoaffinity chromatography. 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 • NCBI - NP_001005464 • GeneID - 126961

Application Details

Tested Applications:	Dot Blot, IF, WB
Application Note:	Anti-Histone H3 [p Thr11] antibody is tested for Western Blot, Dot Blot, and Immunofluorescence. This antibody is useful for Chromatin Immunoprecipitation and Immunocytochemistry. 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 HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	2-5µg/million cells
IF:	1:50
IHC:	1:50
WB:	1:1000

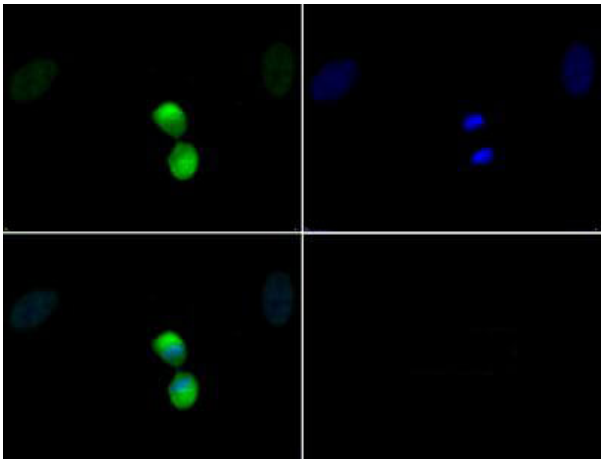
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.2 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:	30% Glycerol

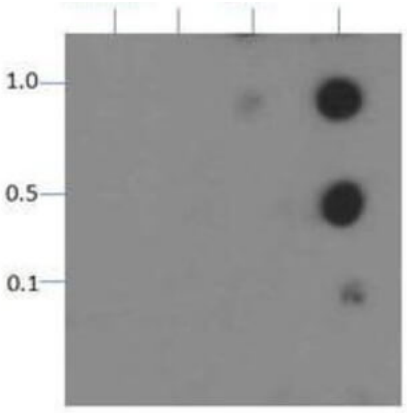
Shipping & Handling

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.

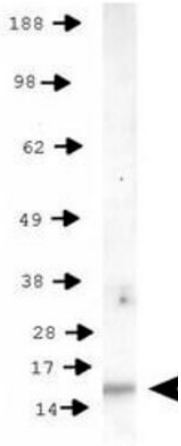
Images



Immunofluorescence Microscopy
Immunofluorescence of Rabbit Anti-Histone H3 [p Thr11] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Thr11] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [p Thr11] is nuclear and chromosomal. Staining: Histone H3 [p Thr11] is expressed in green, nuclei are counterstained with Dapi (blue).



Dot Blot
Dot Blot of Rabbit Histone H3 [p Thr11] Antibody. Lane 1: Unmodified. Lane 2: S10. Lane 3: S10-T11. Lane 4: T11. Load: 0.1, 0.5, and 1.0 picomoles of peptide. Primary antibody: Histone H3 [p Thr11] antibody at 1:1000 for 45 min at 4°C. Secondary antibody: Dylight™488 rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.



Western Blot
Western Blot of Rabbit Anti-Histone H3 [p Thr11] Antibody. Lane 1: HeLa histone preps. Load: 30 µg per lane. Primary antibody: Histone H3 [p Thr11] at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~15 kDa. Other band(s): None.

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