

## Product Datasheet

# Histone H3 K4me2/phospho T3 Antibody (orb420382)

<b>Catalog Number</b>	orb420382
<b>Category</b>	Antibodies
<b>Description</b>	Histone H3 K4me2/pT3 antibody
<b>Clonality</b>	Polyclonal
<b>Species/Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse
<b>Form/Appearance</b>	Liquid (sterile filtered)
<b>Concentration</b>	0.83 mg/ml
<b>Buffer/Preservatives</b>	Preservative: 0.01% (w/v) Sodium Azide. Stabilizer: 30% Glycerol; Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Purity</b>	Anti-Histone H3 [Dimethyl Lys4, p Thr3] 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.

### Biorbyt Ltd.

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

### Biorbyt LLC

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

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<b>Immunogen</b>	Histone H3 [Dimethyl Lys4, p Thr3] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with synthetic dimethylated/phosphorylated peptides surrounding Lysine 4 and Threonine 3 of human Histone H3.2.
<b>UniProt ID</b>	<b>Q71DI3</b>
<b>Tested applications</b>	ChIP, DOT, IF, IHC, Multiplex Assay, WB
<b>Dilution range</b>	ChIP: 2-5µg/million cells, IHC: 1:50, IF: 1:50, WB: 1:500
<b>Application notes</b>	Anti-Histone H3 [Dimethyl Lys4, p Thr3] antibody is tested 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 HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus antibody production in collaboration with Novus Biologicals.
<b>Antibody Type</b>	Primary Antibody
<b>Storage</b>	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.
<b>Dry Ice Shipping</b>	<b>Please note: This product requires shipment on dry ice. A dry ice surcharge will apply.</b>
<b>Note</b>	For research use only
<b>NCBI</b>	<b>NP_001005464</b>
<b>Expiration Date</b>	12 months from date of receipt.

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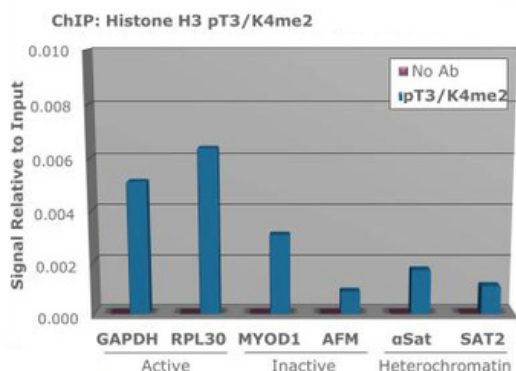
7 Signet Court, Swann Road  
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United Kingdom

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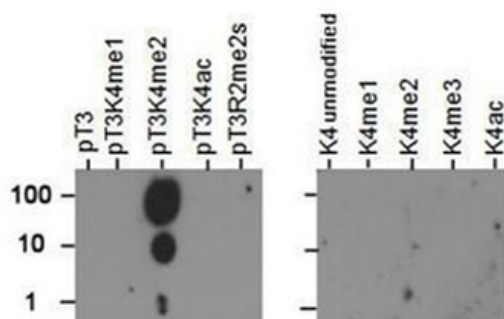
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68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

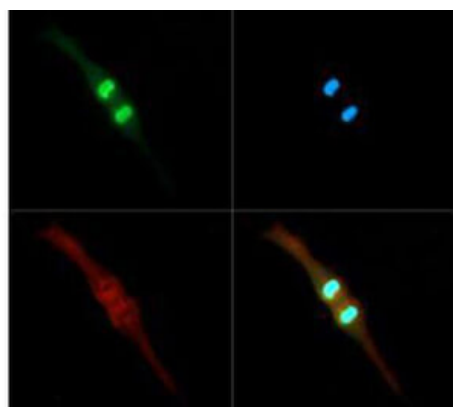
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Chromatin Immunoprecipitation of Rabbit Anti-Histone H3 [p Thr3, Dimethyl Lys4] Antibody. Chromatin from one million formaldehyde cross-linked HeLa cells was used with 2 ug of Anti-Histone H3 K4 Me2 pT3 and 20 ul of magnetic IgG beads per immunoprecipitation. A no antibody (No Ab) control was also used. Immunoprecipitated DNA was quantified using quantitative real-time PCR and SYBR green dye, then normalized to the non-precipitated input chromatin, which is equal to one.



Dot Blot of Rabbit Histone H3 [p Thr3, Dimethyl Lys4] Antibody. Antigen: Methylated forms of the immunizing peptide. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 [p Thr3, Dimethyl Lys4] antibody at 1:1000 for 45 min at 4°C. Secondary antibody: Dylight™ 488 rabbit secondary antibody at 1:10000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.



Immunofluorescence Microscopy of Rabbit Anti-Histone H3 [p Thr3, Dimethyl Lys4] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Thr3, Dimethyl Lys4] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10000 for 45 min at RT. Localization: Histone H3 [p Thr3, Monomethyl Lys4] is nuclear and chromosomal. Staining: Histone H3 [p Thr3, Dimethyl Lys4] is expressed in green while the nuclei and alpha-tubulin were coexpressed with DAPI (blue) and Dylight 550 (red).

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Western Blot of Rabbit Anti-Histone H3 [p Thr3, Dimethyl Lys4] Antibody. Lane 1: NIH-3T3 histone prep lysate. Load: 30  $\mu$ g per lane. Primary antibody: Histone H3 [p Thr3, Dimethyl Lys4] at 1:50 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10000 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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