

**Thermo Scientific pHH3
Rabbit Polyclonal Antibody**

Catalog # RB-9425-P or -P0 (1.0ml or 0.1ml)

Catalog # RB-9425-R7 (7.0ml) (Ready-to-Use for Immunohistochemistry)

Catalog # RB-9425-RQ (12.0ml) (Ready-to-Use for Immunohistochemistry)

Please note this data sheet has been changed effective March 2, 2017

Description: Histone H3 is phosphorylated at Ser¹⁰ or Ser²⁸ almost exclusively during late G2, and M phase of the cell cycle. Correlation between chromosomal condensation and HH3 phosphorylation during early prophase are well established. Detecting pHH3 by immunohistochemistry (IHC) is useful in assessing mitotic activity, tumor grade and in predicting prognosis. pHH3 IHC is useful in recognizing mitotic figures, as apoptotic features are not reactive to pHH3. High pHH3 expression is associated with high-grade tumors in ovarian, endometrial, neuroendocrine, meningiomas and other cancers.

Mol. Wt. Of Antigen: 17kDa**Epitope:** not determined**Ig Isotype:** N/A**Species Reactivity:** Human. Others not tested**Clone Designation:** N/A**Immunogen:** N/A**Applications and Suggested Dilutions:**

- Immunohistochemistry (Formalin/paraffin)
(Use Ab at 1:100 for 20min at RT using
UltraVision LP Detection System

(Use Ab at 1:200 for 20min at RT using
UltraVision Quanto Detection Systems)

Dilute antibody in Thermo Scientific Antibody
Diluent OP Quanto, TA-125-ADQ

*(Staining of formalin-fixed paraffin-embedded tissue sections requires treating the tissue sections in antigen retrieval buffer HIER Buffer H (Cat. #TA-135-HBH) after deparaffinization by heating to 98°C for 20 min using the Thermo Scientific PT Module)

The optimal dilution for a specific application should be determined by the investigator.

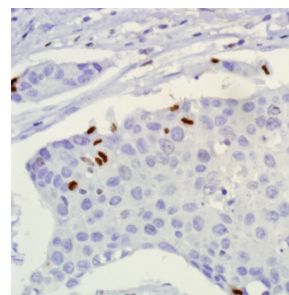
Positive Control: Tonsil**Cellular Localization:** Nuclear**Supplied As:** Purified antibody prepared in 10mM PBS, pH 7.4, with 0.2% BSA and ≤0.1% sodium azide.

or

Prediluted antibodies (-R7 or -RQ) which are ready-to-use for Immunohistochemistry with UltraVision LP Detection Systems or UltraVision Quanto Detection Systems respectively.

Storage and Stability:

Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.



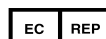
Formalin-fixed, paraffin-embedded human Breast Ca. stained with Thermo Scientific pHH3 (Cat. #RB-9425) using UltraVision Quanto HRP Detection System with DAB Quanto.

References:

- Brunner A. et al. pHH3 and surviving are co-expressed in high-risk endometrial cancer and are prognostic relevant. *BJC* 2012, 107: 84-90.
- Sun A. et al. Level of phosphohistone H3 among various types of human cancers. *BMJ Open* Aug 28, 2012 (7 pages).
- Tsuta K et al. Using the Mitosis-Specific Marker Anti-Phosphohistone H3 to Assess Mitosis in Pulmonary Neuroendocrine



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Carcinomas. Am J Clin Pathol
2011;136:252-259

- Goto H et al. Identification of a Novel Phosphorylation Site on Histone H3 Coupled with Mitotic Chromosome Condensation. JBC, Sept 3, 1999, 274(36): 25543–25549.

Limitations and Warranty:

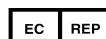
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Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains $\leq 0.1\%$ sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

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