

**Rabbit Anti-Parafibromin/HRPT2/CDC73 [MD359R]: RM0413, RM0413RTU7**

**Intended Use:** For Research Use Only

**Description:** Parathyroid tumors are heterogeneous and diagnosis of the disease is often difficult. The Parafibromin protein may be important as a marker for diagnosing parathyroid carcinoma. Parafibromin is encoded by the endocrine tumor suppressor gene CDC73 (cell division cycle 73, Paf1/RNA polymerase II complex component), alternatively known as the HRPT2 (hyperparathyroidism-jaw tumor syndrome 2) gene. The human CDC73 gene, which maps to chromosome 1q25, is the human homolog of *Saccharomyces cerevisiae* Cdc73 and is responsible for the hyperparathyroidism with jaw tumor syndrome (HPT-JT). Parafibromin is part of the RNA polymerase II/Paf1 complex, which is crucial for histone modification. This Parafibromin complex binds to both the nonphosphorylated forms and the Ser 2 and Ser 5 phosphorylated forms of the RNA polymerase II large subunit.

**Specifications**

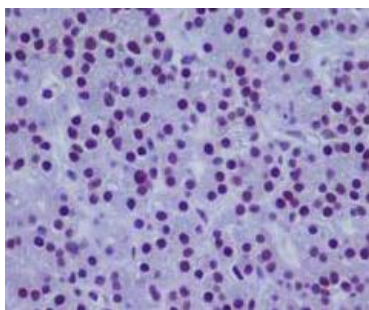
|               |  |
|---------------|--|
| Clone:        | MD359R   |
| Source:       | Rabbit   |
| Isotype:      | IgG  |
| Reactivity:   | Human, mouse, rat  |
| Immunogen:    | Human Parafibromin protein   |
| Localization: | Nucleus  |
| Formulation:  | Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN <sub>3</sub> ) |
| Storage:      | Store at 2°- 8°C   |
| Applications: | IHC, WB  |
| Package:      |  |

| Description                           | Catalog No. | Size |
|---------------------------------------|-------------|------|
| Parafibromin/HRPT2/CDC73 Concentrated | RM0413      | 1 ml |
| Parafibromin/HRPT2/CDC73 Prediluted   | RM0413RTU7  | 7 ml |

**IHC Procedure\***

|                           |   |
|---------------------------|---|
| Positive Control Tissue:  | Colon, breast, adrenal, parathyroid, testis, cervix, lymphoblastic Lymphoma         |
| Concentrated Dilution:    | 25-100  |
| Pretreatment:             | Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C |
| Incubation Time and Temp: | 30-60 minutes @ RT  |
| Detection:                | Refer to the detection system manual  |

\* Result should be confirmed by an established diagnostic procedure.



FFPE human colon stained with anti-Parafibromin using DAB

**References:**

1. Characterization of the Human Transcription Elongation Factor Rtf1: Evidence for Nonoverlapping Functions of Rtf1 and the Paf1 Complex. Cao, QF. et al. Mol. Cell. Biol.. 35: 3459-70, 2015.
2. Characterization of a new CDC73 missense mutation that impairs Parafibromin expression and nucleolar localization. Masi, G. et al. PLoS ONE. 9: e97994, 2014.
3. Hyperparathyroidism-jaw tumor syndrome: Results of operative management. Mehta, A. et al. Surgery. 156: 1315-24, 2014.
4. Negative parafibromin staining predicts malignant behavior in atypical parathyroid adenomas. Kruijff, S. et al. Ann. Surg. Oncol.. 21: 426-33, 2014.

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Rev. A