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# Anti-HRPT2 Picoband Antibody

**Catalog # ABO12219**

## Specification

### Anti-HRPT2 Picoband Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q6P1J9 |
| Host | **Rabbit** |
| Reactivity | **Human** |
| Clonality | **Polyclonal** |
| Format | **Lyophilized** |

**Description**
Rabbit IgG polyclonal antibody for Parafibromin(CDC73) detection. Tested with WB in Human.

**Reconstitution**
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-HRPT2 Picoband Antibody - Additional Information

**Gene ID** 79577

**Other Names**
Parafibromin, Cell division cycle protein 73 homolog, Hyperparathyroidism 2 protein, CDC73, C1orf28, HRPT2

**Calculated MW**
60577 MW KDa

**Application Details**
Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**
Nucleus .

**Tissue Specificity**
Found in adrenal and parathyroid glands, kidney and heart. .

**Protein Name**
Parafibromin

**Contents**
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**
E.coli-derived human HRPT2 recombinant protein (Position: Q119-R520). Human HRPT2 shares 100% and 99.8% amino acid (aa) sequence identity with mouse and rat HRPT2, respectively.

**Purification**
Immunogen affinity purified.

**Cross Reactivity**
No cross reactivity with other proteins

Storage

**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**
Belongs to the CDC73 family.

## Anti-HRPT2 Picoband Antibody - Protein Information

**Name** CDC73

**Synonyms** C1orf28, HRPT2

**Function**
Tumor suppressor probably involved in transcriptional and post-transcriptional control pathways. May be involved in cell cycle progression through the regulation of cyclin D1/PRAD1 expression. Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser- 5'-phosphorylated forms and is involved in transcriptional elongation, acting both independently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcription of Hox and Wnt target genes. PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1; it promotes leukemogenesis through association with KMT2A/MLL1-rearranged oncoproteins, such as KMT2A/MLL1-MLLT3/AF9 and KMT2A/MLL1-MLLT1/ENL. PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1); UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. In case of infection by influenza A strain H3N2, PAF1C associates with viral NS1 protein, thereby regulating gene transcription. Connects PAF1C with the cleavage and polyadenylation specificity factor (CPSF) complex and the cleavage stimulation factor (CSTF) complex, and with Wnt signaling. Involved in polyadenylation of mRNA precursors.

**Cellular Location**
Nucleus

**Tissue Location**
Found in adrenal and parathyroid glands, kidney and heart.

## Anti-HRPT2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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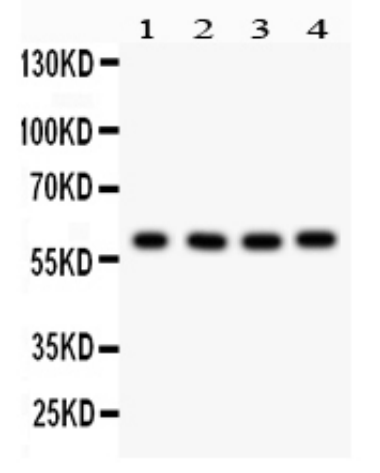
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**Anti-HRPT2 Picoband Antibody - Images**




Anti- HRPT2 Picoband antibody, ABO12219, Western blottingAll lanes: Anti HRPT2 (ABO12219) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: HEPG2 Whole Cell Lysate at 40ugLane 3: 293T Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 61KDObserved bind size: 61KD

**Anti-HRPT2 Picoband Antibody - Background**

Cell division cycle 73, also known as HRPT2, is a protein which in humans is encoded by the CDC73 gene. This gene encodes a tumor suppressor that is involved in transcriptional and post-transcriptional control pathways. The protein is a component of the the PAF protein complex, which associates with the RNA polymerase II subunit POLR2A and with a histone methyltransferase complex. And this protein appears to facilitate the association of 3' mRNA processing factors with actively-transcribed chromatin. Mutations in this gene have been linked to hyperparathyroidism-jaw tumor syndrome, familial isolated hyperparathyroidism, and parathyroid carcinoma.