

Anti-HRPT2 Picoband Antibody

Catalog # ABO12219

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.

Additional Information

Gene ID	79577
Other Names	Parafibromin, Cell division cycle protein 73 homolog, Hyperparathyroidism 2 protein, CDC73, C1orf28, HRPT2
Calculated MW	60577
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus .
Tissue Specificity	Found in adrenal and parathyroid glands, kidney and heart. .
Source	Eukaryota
Protein Name	Parafibromin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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 reconstitution, 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.

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.

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.

Images

Anti- HRPT2 Picoband antibody, ABO12219, Western blottingAll lanes: Anti HRPT2 (ABO12219) at 0.5ug/mL
Lane 1: Human Placenta Tissue Lysate at 50ugLane 2: HEPG2



Whole Cell Lysate at 40ug
Lane 3: 293T Whole Cell Lysate at 40ug
Lane 4: HELA Whole Cell Lysate at 40ug
Predicted bind size: 61KD
Observed bind size: 61KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.