10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-CDC73 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1207

Specification

KD-Validated Anti-CDC73 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q6P1J9
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 61 kDa , observed, 61 kDa KDa**
Gene Name	**CDC73**
Aliases	**CDC73; Cell Division Cycle 73; Parafibromin; HRPT2; FIHP; Paf1/RNA Polymerase II Complex Component; Cell Division Cycle Protein 73 Homolog; Familial Isolated Hyperparathyroidism; Hyperparathyroidism 2 Protein; C1orf28; HRPT1; Cell Division Cycle 73, Paf1/RNA Polymerase II Complex Component, Homolog (S. Cerevisiae); Cell Division Cycle 73 Paf1/RNA Polymerase II Complex Component-Like Protein; Cell Division Cycle 73, Paf1/RNA Polymerase II Complex Component, Homolog; Hyperparathyroidism 2 (With Jaw Tumor); Chromosome 1 Open Reading Frame 28; Hyperparathyroidism 1; PARAFIBROMIN; C1ORF28; HPTJT; HYX**
Immunogen	**A synthesized peptide derived from human HRPT2 / CDC73**

KD-Validated Anti-CDC73 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**79577**

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

KD-Validated Anti-CDC73 Rabbit Monoclonal 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.

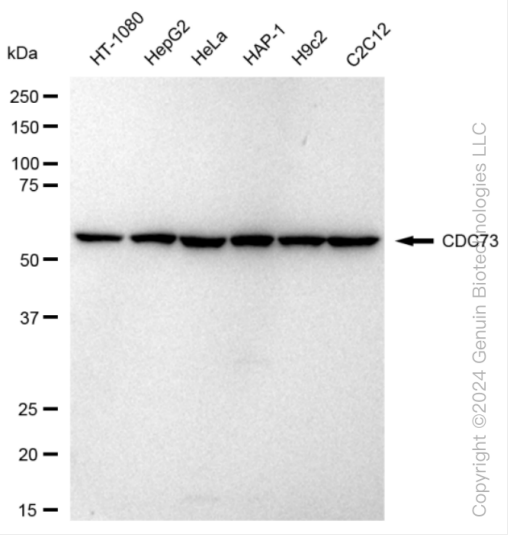
KD-Validated Anti-CDC73 Rabbit Monoclonal Antibody - Protocols

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

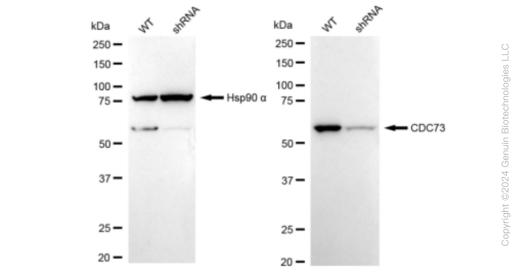
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-CDC73 Rabbit Monoclonal Antibody - Images

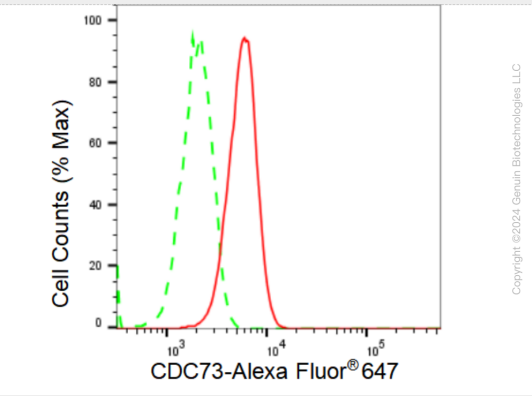
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blotting analysis using anti-CDC73 antibody (Cat#AGI1207). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CDC73 antibody (Cat#AGI1207, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

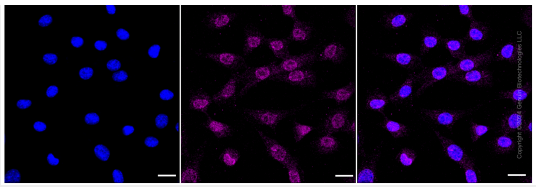


Western blotting analysis using anti-CDC73 antibody (Cat#AGI1207). CDC73 expression in wild type (WT) and CDC73 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-CDC73 antibody (Cat#AGI1207, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of CDC73 expression in C2C12 cells using CDC73 antibody (Cat#AGI1207, 1:2,000). Green, isotype control; red, CDC73.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunocytochemical staining of C2C12 cells with CDC73 antibody (Cat#AGI1207, 1:1,000). Nuclei were stained blue with DAPI; CDC73 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.