

For Research Use Only

# HRPT2, CDC73 Monoclonal antibody

Catalog Number: 66490-1-Ig

Featured Product

4 Publications



## Basic Information

### Catalog Number:

66490-1-Ig

### Size:

150ul, Concentration: 1500 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

### Source:

Mouse

### Isotype:

IgG2a

### Immunogen Catalog Number:

AG2959

### GenBank Accession Number:

BC014351

### GeneID (NCBI):

79577

### UNIPROT ID:

Q6P1J9

### Full Name:

cell division cycle 73, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)

### Calculated MW:

531 aa, 61 kDa

### Observed MW:

61 kDa

### Purification Method:

Protein A purification

### CloneNo.:

4B4H2

### Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:200-1:800

IF-P 1:50-1:500

IF-Fro 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat, pig

### Cited Species:

human, mouse

### Positive Controls:

WB : pig brain tissue, LNCaP cells, HeLa cells, mouse brain tissue, HEK-293 cells, Caco-2 cells, RAW 264.7 cells

IHC : human breast cancer tissue,

IF-P : human breast cancer tissue,

IF-Fro : mouse breast cancer,

**Note-IHC: suggested antigen retrieval with**

**TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Parafibromin is a product of the hyperparathyroidism-jaw tumor syndrome gene HRPT2/CDC73, a putative tumor suppressor gene recently implicated in the autosomal dominant hyperparathyroidism-jaw tumor familial cancer syndrome, sporadic parathyroid cancer, and a minority of families with isolated hyperparathyroidism (PMID: 15580289). Defects in CDC73 are causes of hyperparathyroidism type 1 (HRPT1) and hyperparathyroidism type 2 (HRPT2) as well as parathyroid carcinoma (PRTC) (PMID: 12434154). Tumor suppressor parafibromin to the transcription elongation and RNA processing pathway as a PAF1 complex- and RNA polymerase II-bound protein (PMID: 15923622). Besides, parafibromin is also involved in post-transcriptional control pathways (PMID: 16116486). Recent report has revealed that pathogenic mutation, such as CDC73 gene mutation, is able to affect histone monoubiquitination (PMID: 22021426).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yabo Ma	36414229	J Proteomics	WB
Naomi Hatabu	30739106	Horm Res Paediatr	IHC
Sicong Zhang	39211208	bioRxiv	

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

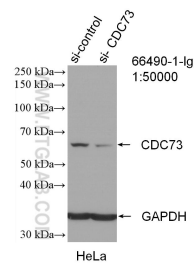
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

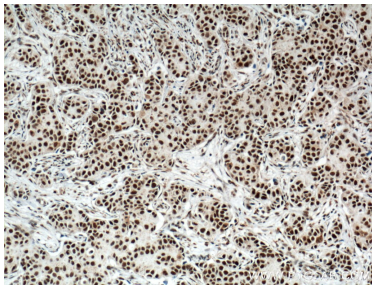
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

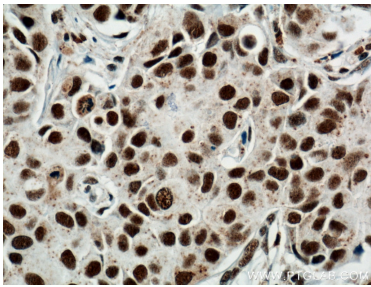
Selected Validation Data



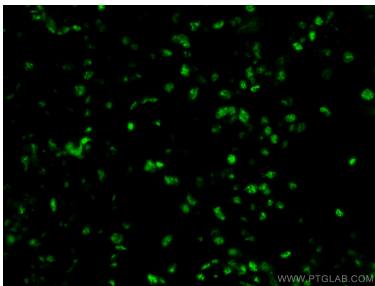
WB result of HRPT2, CDC73 antibody (66490-1-Ig; 1:50000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HRPT2, CDC73 transfected HeLa cells.



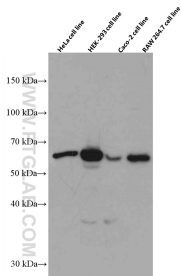
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66490-1-Ig (HRPT2, CDC73 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



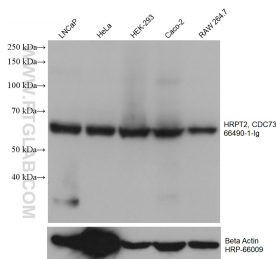
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66490-1-Ig (HRPT2; CDC73 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



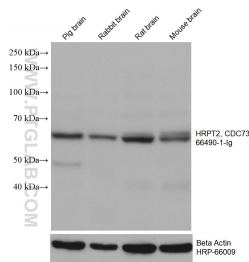
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using HRPT2, CDC73 antibody (66490-1-Ig, Clone: 4B4H2 ) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



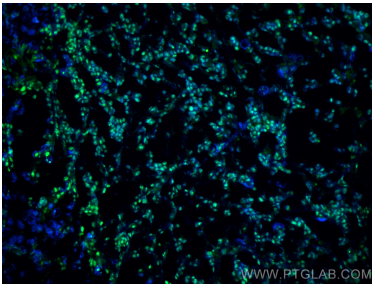
Various lysates were subjected to SDS PAGE followed by western blot with 66490-1-Ig (HRPT2, CDC73 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 66490-1-Ig (HRPT2, CDC73 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



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Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse breast cancer using HRPT2, CDC73 antibody (66490-1-Ig, Clone: 4B4H2 ) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).