

For Research Use Only

POLRMT Polyclonal antibody

Catalog Number: 17748-1-AP

1 Publications



Basic Information

Catalog Number:

17748-1-AP

Size:

150 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12012

GenBank Accession Number:

BC098387

GeneID (NCBI):

5442

UNIPROT ID:

O00411

Full Name:

polymerase (RNA) mitochondrial
(DNA directed)

Calculated MW:

1230 aa, 139 kDa

Observed MW:

130-139 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:200-1:1000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human

Positive Controls:

WB : HepG2 cells, COLO 320 cells, HeLa cells

IHC : human ovary cancer tissue,

IF/ICC : U2OS cells,

**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

Mitochondrial DNA-dependent RNA polymerase (POLRMT) is responsible for the transcription of mitochondrial genome encoding key components of oxidative phosphorylation. Structurally, POLRMT comprises four main domains: the N-terminal extension, a pentatricopeptide repeat (PPR) domain, the N-terminal domain, and the C-terminal domain (PMID: 33602924). POLRMT requires transcription factor B2M (TFB2M) and transcription factor AM (TFAM) for mitochondrial RNA transcription. POLRMT is overexpressed at both the mRNA and protein level in several cancers, including breast, skin, lung, endometrial cancer, and osteosarcomas (PMID: 37371693).

Notable Publications

Author	Pubmed ID	Journal	Application
Yijie Hao	39609546	Nat Chem Biol	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

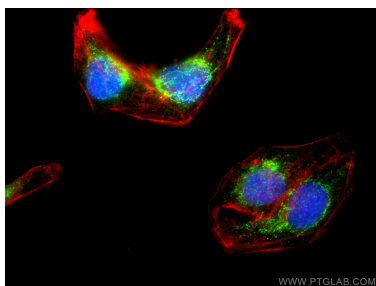
T: 4006900926

E: Proteintech-CN@ptglab.com

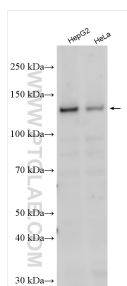
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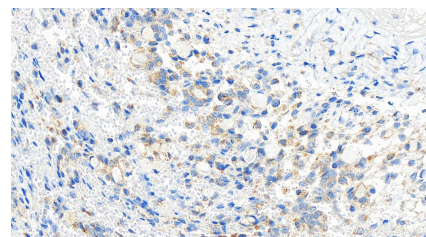
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using POLRMT antibody (17748-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Various lysates were subjected to SDS PAGE followed by western blot with 17748-1-AP (POLRMT antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 17748-1-AP (POLRMT antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).