

For Research Use Only

# MCL1 Polyclonal antibody

Catalog Number: 16225-1-AP

Featured Product

146 Publications



## Basic Information

### Catalog Number:

16225-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10397

### GenBank Accession Number:

BC107735

### GeneID (NCBI):

4170

### UNIPROT ID:

Q07820

### Full Name:

myeloid cell leukemia sequence 1 (BCL2-related)

### Calculated MW:

350 aa, 37 kDa

### Observed MW:

35-40 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.50 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** Jurkat cells, mouse spleen tissue, Raji cells, HL-60 cells, A431 cells, human liver tissue, HEK-293T cells, human brain tissue, K-562 cells, MCF-7 cells, HeLa cells

**IP:** Raji cells,

**IHC:** human ovary cancer tissue,

**IF/ICC:** MCF-7 cells,

**FC (Intra):** Ramos cells,

## Background Information

MCL-1 is an anti-apoptotic member of the Bcl-2 family originally isolated from the ML-1 human myeloid leukemia cell line. Similar to BCL2 and BCL2L1, MCL1 can interact with BAX and/or BAK1 to inhibit mitochondria-mediated apoptosis. Mcl-1 is critical for the proliferation and survival of myeloma cells in vitro, and overexpression of Mcl-1 protein in myeloma cells is associated with relapse and short event-free survival in multiple myeloma patients. Recent studies show that MCL-1 is upregulated in numerous haematological and solid tumour malignancies. Therefore, MCL-1 has been suggested as a potential new therapeutic target. MCL-1 can be alternatively spliced into a long form (MCL-1L, 40 kDa) or a short form (MCL-1S, 30 kDa). (PMID: 15467463, PMID: 15147382)

## Notable Publications

| Author      | Pubmed ID | Journal          | Application |
|-------------|-----------|------------------|-------------|
| Yanhui Zhu  | 36183949  | J Ethnopharmacol | IF          |
| Liping Shan | 33072561  | Front Oncol      | WB          |
| Yang Gao    | 32932732  | Int J Mol Sci    | IHC         |

## 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

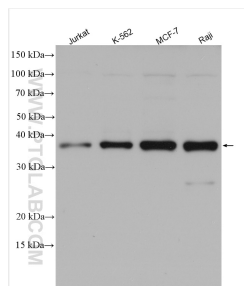
For technical support and original validation data for this product please contact:

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

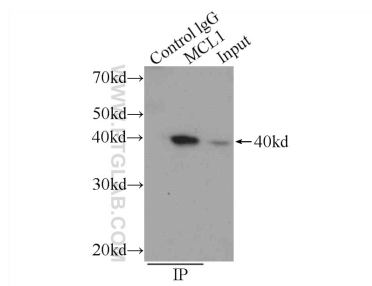
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

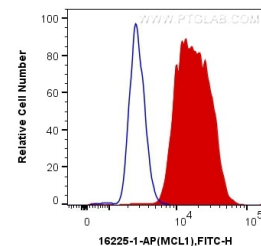
## Selected Validation Data



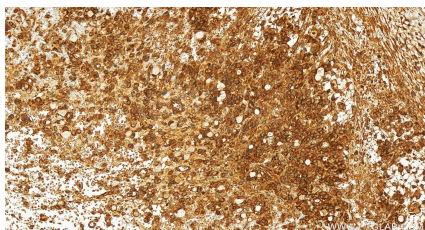
Various lysates were subjected to SDS PAGE followed by western blot with 16225-1-AP (MCL1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



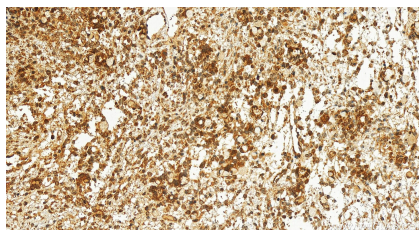
IP result of anti-MCL1 (IP:16225-1-AP, 3ug; Detection:16225-1-AP 1:1000) with Raji cells lysate 800ug.



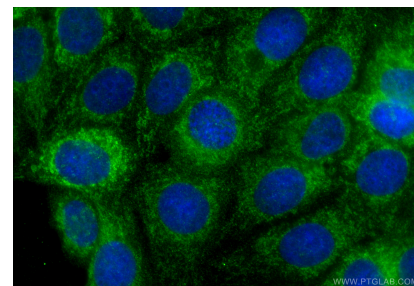
1X10<sup>6</sup> Ramos cells were intracellularly stained with 0.5 ug Anti-Human MCL1 (16225-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 16225-1-AP (MCL1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 16225-1-AP (MCL1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using MCL1 antibody (16225-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).