

# MCL1 Antibody (BH3 Domain Specific)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1312a

### **Product Information**

**Application** WB, IHC-P, FC, E

Primary Accession Q07820

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGCalculated MW37337Antigen Region191-226

## **Additional Information**

**Gene ID** 4170

Other Names Induced myeloid leukemia cell differentiation protein Mcl-1, Bcl-2-like protein

3, Bcl2-L-3, Bcl-2-related protein EAT/mcl1, mcl1/EAT, MCL1, BCL2L3

Target/Specificity This MCL1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 191-226 amino acids from human

MCL1.

**Dilution** WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent

concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** MCL1 Antibody (BH3 Domain Specific) is for research use only and not for use

in diagnostic or therapeutic procedures.

### **Protein Information**

Name MCL1

Synonyms BCL2L3

**Function** Involved in the regulation of apoptosis versus cell survival, and in the

maintenance of viability but not of proliferation. Mediates its effects by

interactions with a number of other regulators of apoptosis. Isoform 1 inhibits apoptosis. Isoform 2 promotes apoptosis.

#### **Cellular Location**

Membrane; Single-pass membrane protein. Cytoplasm. Mitochondrion. Nucleus, nucleoplasm Note=Cytoplasmic, associated with mitochondria

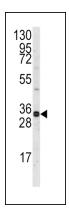
# **Background**

The Mcl-1 protein belongs to the Bcl-2 family. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified. The longer gene product (isoform 1) enhances cell survival by inhibiting apoptosis while the alternatively spliced shorter gene product (isoform 2) promotes apoptosis and is death-inducing.

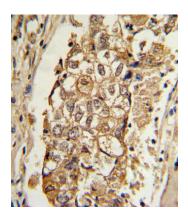
## References

Crossley, L.J., J. Leukoc. Biol. 74(4):583-592 (2003). Kotelkin, A., et al., J. Virol. 77(17):9156-9172 (2003). Erwert, R.D., et al., Microb. Pathog. 35(2):87-93 (2003). Liu, H., et al., Blood 102(1):344-352 (2003). Nijhawan, D., et al., Genes Dev. 17(12):1475-1486 (2003).

# **Images**

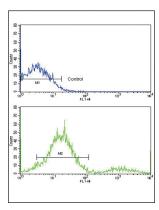


Western blot analysis of anti-Mcl-1 BH3 Domain Pab (Cat. #AP1312a) in Ramos cell line lysates (35ug/lane). Mcl-1-BH3(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma with MCL1 Antibody (BH3 Domain Specific), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of ZR-75-1 cells using MCL1 Antibody (BH3 Domain Specific)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



# **Citations**

- DNA methylation-regulated miR-193a-3p dictates resistance of hepatocellular carcinoma to 5-fluorouracil via repression of SRSF2 expression.
- P-glycoprotein enhances radiation-induced apoptotic cell death through the regulation of miR-16 and Bcl-2 expressions in hepatocellular carcinoma cells.
- Characterization of the TCL-1 transgenic mouse as a preclinical drug development tool for human chronic lymphocytic leukemia.
- Enforced Bcl-2 expression overrides serum and feeder cell requirements for mouse embryonic stem cell self-renewal.

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