

**Mcl-1 Antibody**  
**Catalog # ASC10306****Specification**

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**Mcl-1 Antibody - Product Information**

Application	WB, IF, ICC, E
Primary Accession	<a href="#">Q07820</a>
Other Accession	<a href="#">NP_068779</a> , <a href="#">11386165</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Mcl-1 antibody can be used for detection of isoforms Mcl-1L and Mcl-1S by Western blot at 1 to 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

**Mcl-1 Antibody - Additional Information**Gene ID **4170****Other Names**

Mcl-1 Antibody: TM, EAT, MCL1L, MCL1S, Mcl-1, BCL2L3, MCL1-ES, bcl2-L-3, mcl1/EAT, Induced myeloid leukemia cell differentiation protein Mcl-1, Bcl-2-like protein 3, Bcl2-L-3, myeloid cell leukemia sequence 1 (BCL2-related)

**Target/Specificity**

MCL1; Detects isoforms Mcl-1L and Mcl-1S

**Reconstitution & Storage**

Mcl-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

Mcl-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Mcl-1 Antibody - 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.

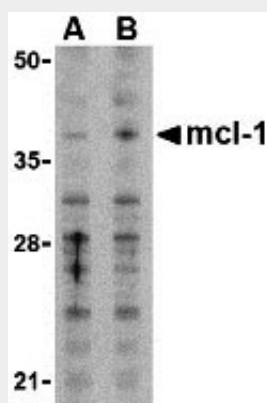
**Cellular Location**

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

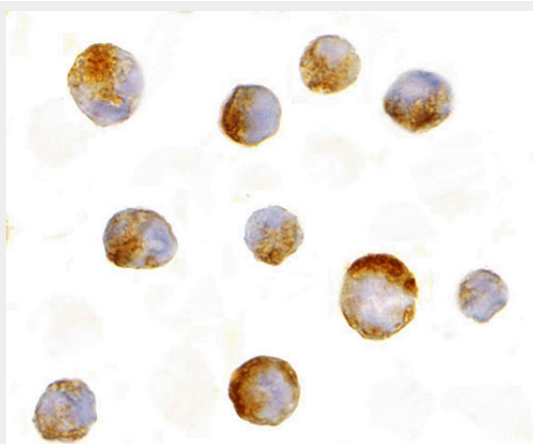
**Mcl-1 Antibody - Protocols**

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

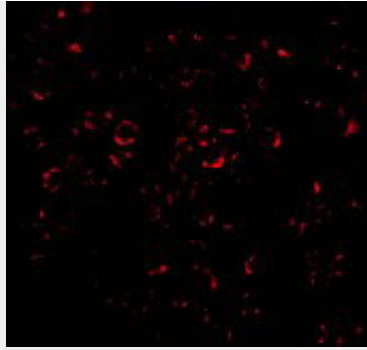
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Mcl-1 Antibody - Images**

Western blot analysis of Mcl-1 in Raji cell lysates with Mcl-1 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of Mcl-1 in Raji cells with Mcl-1 antibody at 10 µg/mL.



Immunofluorescence of Mcl-1 in Raji cells with Mcl-1 antibody at 20 µg/mL.

### **Mcl-1 Antibody - Background**

Mcl-1 Antibody: Myeloid cell leukemia-1 (Mcl-1) is a member of the Bcl-2 family of proteins that can act to promote cell survival. While the mechanism by which Mcl-1 inhibits apoptosis is not known, it is thought that it may heterodimerize and neutralize pro-apoptotic members of the Bcl-2 family such as Bim or Bak. Mcl-1 was originally identified in differentiating myeloid cells, but has since been shown to be expressed in multiple cell types. Mcl-1 is essential for embryogenesis and for the development and maintenance of B and T lymphocytes in animals. Mcl-1 exists as at least three distinct isoforms designated Mcl-1L, Mcl-1S and Mcl-1ES. In marked contrast to the larger isoform of Mcl-1, overexpression of Mcl-1S promotes cell death.

### **Mcl-1 Antibody - References**

Edwards SW, Derouet M, Howse M, et al. Regulation of neutrophil apoptosis by Mcl-1. *Biochem Soc Trans.* 2004; 32:489-92.

Cuconati A, Mukherjee C, Perez D, et al. DNA damage response and MCL-1 destruction initiate apoptosis in adenovirus-infected cells. *Genes and Dev.* 2003; 17:2922-32.

Opferman JT, Letai A, Beard C, et al. Development and maintenance of B and T lymphocytes require antiapoptotic MCL-1. *Nature* 2003; 426:671-6.

Kozopas KM, Yang T, Buchan HL, et al. MCL1, a gene expressed in programmed myeloid cell differentiation, has sequence similarity to BCL2. *Proc. Natl. Acad. Sci. USA* 1993; 90:3516-20.