

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

Mcl-1 Antibody - Product Information

Application	WB, IF, ICC, E
Primary Accession	Q07820
Other Accession	NP_068779 , 11386165
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 InformationGene 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.

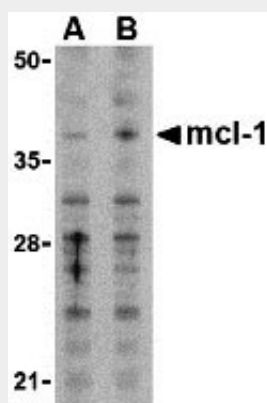
Cellular Location

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

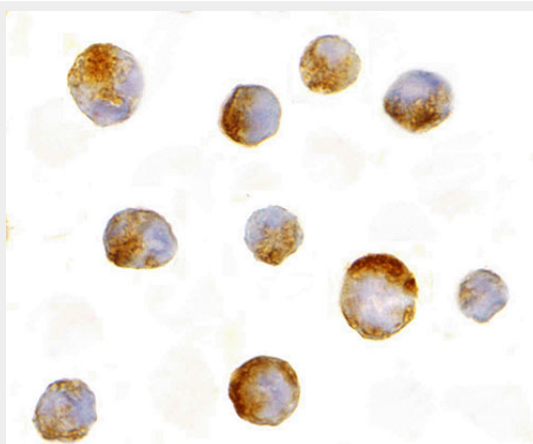
Mcl-1 Antibody - Protocols

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

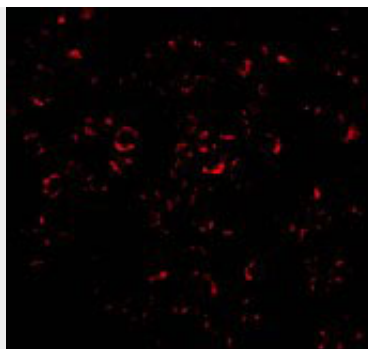
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mcl-1 Antibody - Images

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



Immunocytochemistry of Mcl-1 in Raji cells with Mcl-1 antibody at 10 μ g/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.