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# Mcl-1 Antibody

Catalog # ASC10307

## Product Information

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| **Application** | WB, ICC, E |
| **Primary Accession** | Q07820 |
| **Other Accession** | NP_068779, 11386165 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 37337 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | Mcl-1 antibody can be used for detection of isoforms Mcl-1L and Mcl-1S by Western blot at 0.5 to 2 □g/mL. Antibody can also be used for immunocytochemistry starting at 10 □g/mL. |

## Additional Information

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| **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℃ for three months and -20℃, 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. |

## Protein Information

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| **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

Mcl-1 Antibody: Myeloid cell leukimia-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.

## References

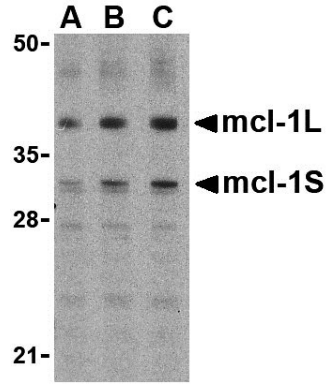

Edwards SW, Derouet M, Howse M, et al. Regulation of neutrophil apoptosis by Mcl-1. Biochem Soc Trans. 2004; 32:489-92.

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.

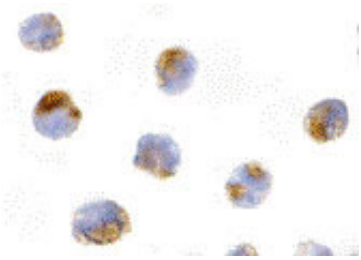
Opferman JT, Letai A, Beard C, et al. Development and maintenance of B and T lymphocytes require antiapoptotic MCL-1. Nature 2003; 426:671-6.

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.


## Images




Western blot analysis of Mcl-1 in Raji cell lysates with Mcl-1 antibody (IN) at (A) 0.5, (B) 1, and (C) 2 µg/mL.



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