

# Mcl-1 Antibody

Catalog # ASC10306

## Product Information

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| <b>Application</b>           | WB, IF, ICC, E   |
| <b>Primary Accession</b>     | <a href="#">Q07820</a>   |
| <b>Other Accession</b>       | <a href="#">NP_068779</a> , <a href="#">11386165</a>   |
| <b>Reactivity</b>            | Human  |
| <b>Host</b>                  | Rabbit   |
| <b>Clonality</b>             | Polyclonal   |
| <b>Isotype</b>               | IgG  |
| <b>Calculated MW</b>         | 37337  |
| <b>Concentration (mg/ml)</b> | 1 mg/mL  |
| <b>Conjugate</b>             | Unconjugated   |
| <b>Application Notes</b>     | Mcl-1 antibody can be used for detection of isoforms Mcl-1L and Mcl-1S by Western blot at 1 to 2 $\mu$ g/mL. Antibody can also be used for immunocytochemistry starting at 10 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL. |

## Additional Information

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| <b>Gene ID</b>                      | 4170  |
| <b>Other Names</b>                  | 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)               |
| <b>Target/Specificity</b>           | MCL1; Detects isoforms Mcl-1L and Mcl-1S  |
| <b>Reconstitution &amp; Storage</b> | 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. |
| <b>Precautions</b>                  | Mcl-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.  |

## Protein Information

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| <b>Name</b>     | MCL1   |
| <b>Synonyms</b> | BCL2L3   |
| <b>Function</b> | 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

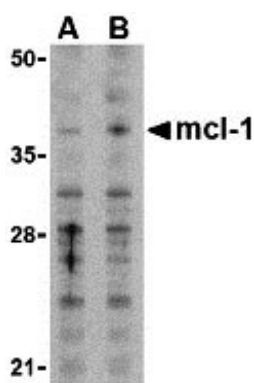
## Background

Mcl-1 Antibody: Myeloid cell 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.

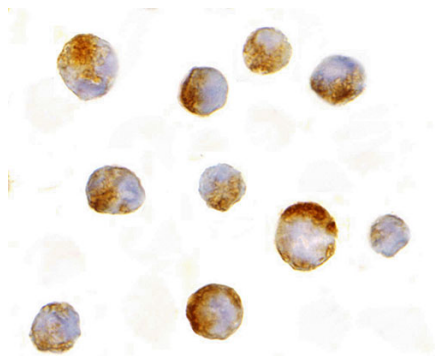
## References

- 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

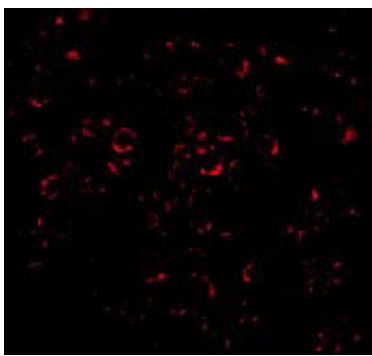


Western blot analysis of Mcl-1 in Raji cell lysates with Mcl-1 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunocytochemistry of Mcl-1 in Raji cells with Mcl-1 antibody at 10  $\mu$ g/mL.

Immunofluorescence of Mcl-1 in Raji cells with Mcl-1 antibody at 20  $\mu$ g/mL.



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