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Mcl-1 Antibody

Catalog # ASC10306

Product Information

Application	WB, IF, 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 1 to 2 g/mL. Antibody can also be used for immunocytochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

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℃ 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

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

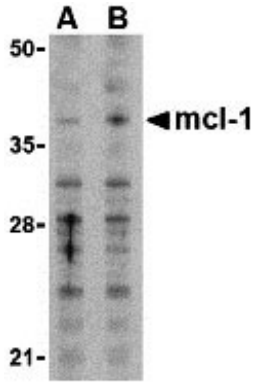
Background

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.

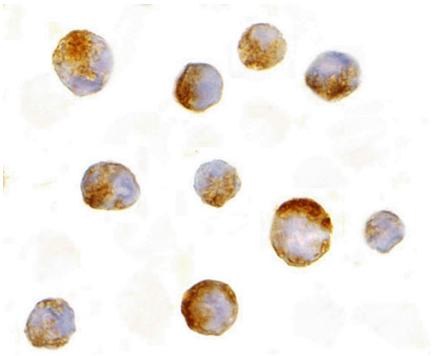
References

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

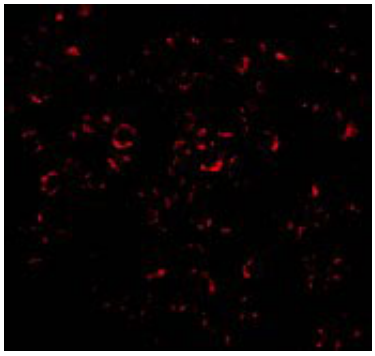


Western blot analysis of Mcl-1in Raji cell lysates with Mcl-1 antibody at (A) 1 and (B) 2 µg/mL.



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.



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