

MCL-1 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1027a

Specification

MCL-1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, ICC, E <u>Q07820</u> Human Mouse Monoclonal IgG1 37kDa KDa

Mcl-1 (Myeloid cell leukemia-1) is Bcl-2-related and was identified as an early-induction gene thatincreased in expression during the differentiation of human myeloblastic leukemia cell ML-1, or exposure to different DNA damaging agents. The level of Mcl-1 is decreased in peripheral B lymphocytes undergoing apoptosis following treatment with apoptotic stimuli such as TGF-alpha 1 and forskolin. Expression of Mcl-1 is able to delay apoptosis induced by over-expression of c-myc in CHO 5AHSmyc cells. In hematopoietic FDC-P1 cells, Mcl-1 interacts with another Bcl-2-related protein, Bax, and prolongs cell viability after treatment with different apoptotic reagents. This monoclonal antibody detected a 37kd MCL1 in BCBL-1 cell lysate.

Immunogen Purified recombinant fragment of human MCL-1 expressed in E. Coli.

Formulation Purified antibody in PBS containing 0.03% sodium azide.

MCL-1 Antibody - Additional Information

Gene ID 4170

Other Names Induced myeloid leukemia cell differentiation protein Mcl-1, Bcl-2-like protein 3, Bcl2-L-3, Bcl-2-related protein EAT/mcl1, mcl1/EAT, MCL1, BCL2L3

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 ICC~~N/A E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MCL-1 Antibody - Images



Figure 1: Western blot analysis using MCL1 mouse mAb against Hela (1), BCBL-1 (2), Jurkat (3) and HL60 (4) cell lysate.





Figure 2: Immunohistochemical analysis of paraffin-embedded human lymphnode tissues using MCL1 mouse mAb with DAB staining.



Figure 3: Confocal immunofluorescence analysis of HepG2 cells using MCL1 mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

MCL-1 Antibody - References

1. Ota, N. et al. J. Hum. Genet. 2000. 46: 254-269. 2. Schwertfeger KL, Ryder JW, Anderson SM J Mammary Gland Biol Neoplasia 2000, 3 : 236-251.