

# Anti-MCL1 Antibody

Catalog # ABO10821

## Specification

# Anti-MCL1 Antibody - Product Information

ApplicationWBPrimary AccessionQ07820HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for Induced myeloid leukemia cell differentiation proteinMcl-1(MCL1) detection. Tested with WB in Human.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-MCL1 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

Calculated MW 37337 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human<br>

**Subcellular Localization** 

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

**Protein Name** Induced myeloid leukemia cell differentiation protein Mcl-1

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the C-terminus of human MCL1(303-325aa RDWLVKQRGWDGFVEFFHVEDLE), different from the related mouse sequence by one amino acid.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the Bcl-2 family.

### Anti-MCL1 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

#### **Anti-MCL1 Antibody - Protocols**

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

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

Anti-MCL1 Antibody - Images





Anti-MCL1 antibody, ABO10821, Western blottingAll lanes: Anti MCL1 (ABO10821) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 37KDObserved bind size: 37KD

# Anti-MCL1 Antibody - Background

BCL2L3, also known as MCL1(myeloid cell leukemia sequence 1) encodes an anti-apoptotic protein, which is a member of the Bcl-2 family. Alternative splicing results in multiple transcript variants. The longest gene product(isoform 1) enhances cell survival by inhibiting apoptosis while the alternatively spliced shorter gene products(isoform 2 and isoform 3) promote apoptosis and are death-inducing. Using the methods of somatic cell hybrid analysis and fluorescence in situ hybridization), the MCL1 gene is mapped to human 1q21.MCL1is a critical and specific regulator essential for ensuring the homeostasis of early hematopoietic progenitors. Phosphorylation of MCL1 directs its interaction with the tumor suppressor protein FBW7, which is the substrate-binding component of a ubiquitin ligase complex. The polyubiquitylation of MCL1 then targets it for proteasomal degradation. The degradation of MCL1 was blocked in patient-derived tumor cells that lacked FBW7 or had loss-of-function mutations in FBW7, conferring resistance to antitubulin agents and promoting chemotherapeutic-induced polyploidy.