Mcl-1 Antibody 

For Research Use Only. Not For Use In Diagnostic Procedures.

**Applications:**
- WB
- Reactivity: H
- Sensitivity: Endogenous
- MW (kDa): 40
- Source: Rabbit
- UniProt ID: Q07820
- Entrez-Gene Id: 4170

**Product Usage Information**

**Application**
- Western Blotting
- Dilution: 1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity / Sensitivity**

Mcl-1 Antibody detects endogenous levels of human Mcl-1. The antibody does not cross-react with other Bcl-2 family members at physiological levels.

**Species Reactivity:**
- Human

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser121 of human Mcl-1. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

Mcl-1 is an anti-apoptotic member of the Bcl-2 family originally isolated from the ML-1 human myeloid leukemia cell line during phorbol ester-induced differentiation along the monocyte/macrophage pathway (1). Similar to other Bcl-2 family members, Mcl-1 localizes to the mitochondria (2), interacts with and antagonizes pro-apoptotic Bcl-2 family members (3), and inhibits apoptosis induced by a number of cytotoxic stimuli (4). Mcl-1 differs from its other family members in its regulation at both the transcriptional and post-translational level. First, Mcl-1 has an extended amino-terminal PEST region, which is responsible for its relatively short half-life (1,2). Second, unlike other family members, Mcl-1 is rapidly transcribed via a PI3K/Akt dependent pathway, resulting in its increased expression during myeloid differentiation and cytokine stimulation (1,5-7). Mcl-1 is rapidly transcribed via a PI3K/Akt dependent pathway, resulting in its increased expression during myeloid differentiation and cytokine stimulation (1,5-7). Mcl-1 is phosphorylated in response to treatment with phorbol ester, microtubule-damaging agents, oxidative stress, and cytokine withdrawal (8-11). Phosphorylation at Thr163, the conserved MAP kinase/ERK site located within the PEST region, slows Mcl-1 protein turnover (10) but may prime the GSK-3 mediated phosphorylation at Ser159 that leads to Mcl-1 destabilization (11). Mcl-1 deficiency in mice results in peri-implantation lethality (10) but may prime the GSK-3 mediated phosphorylation at Ser159 that leads to Mcl-1 destabilization (11). Mcl-1 deficiency in mice results in peri-implantation lethality (10) but may prime the GSK-3 mediated phosphorylation at Ser159 that leads to Mcl-1 destabilization (11). Mcl-1 deficiency in mice results in peri-implantation lethality (10) but may prime the GSK-3 mediated phosphorylation at Ser159 that leads to Mcl-1 destabilization (11).

**Suppliers**

Mcl-1 Antibody (#4572) Datasheet Without Images Cell Signaling Technology

Sources:
- Orders: 877-616-CELL (2355)
- Support: 877-678-TECH (8324)
- Web: info@cellsignal.com

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**Important:** For primary antibodies recommended for western blotting applications, we recommend incubating the membrane with diluted antibody at 4°C with gentle shaking overnight. Please refer to the western blot protocol found on the product web page for the antibody-specific diluent recommendation.

**References:**

**Applications Key:**
- WB: Western Blotting
- IP: Immunoprecipitation
- IHC: Immunohistochemistry
- ChIP: Chromatin Immunoprecipitation
- F: Flow Cytometry
- E: ELISA

**Cross-Reactivity Key:**
- H: Human
- M: Mouse
- R: Rat
- Hm: Hamster
- Mm: Monkey
- V: Virus
- M: Mink
- C: Chicken
- D: Dog
- B: Bovine
- X: Xenopus
- Z: Zebrafish
- P: Pig
- Sc: Scerevisiae
- Gc: Canine
- H: Horse
- A: All

**Cell Signaling Technology**

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

[Links and images related to the antibody and product information]
#4572

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Limited Uses

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