

Mcl-1 (H-260): sc-20679

BACKGROUND

B cell CLL/lymphoma-2 (Bcl-2) blocks cell death following a variety of stimuli and confers a death-sparing effect to certain hematopoietic cell lines following growth factor withdrawal. Myeloid cell leukemia-1 (Mcl-1) shares sequence homology with Bcl-2 and further resembles Bcl-2 in that its expression promotes cell viability. p53 and Mcl-1 demonstrate opposing effects on mitochondrial apoptosis by mediating Bcl-2 antagonist killer (Bak) activity. Mcl-1 is an important and specific regulator that is necessary for the homeostasis of early hematopoietic progenitors. Glycogen synthase kinase-3 (GSK-3) controls Mcl-1 stability, which has an effect on the regulation of apoptosis by growth factors PI 3-kinase and Akt. Mice with a deficiency of the Mcl-1 protein show a significant reduction in B and T lymphocytes similar to the effects observed in IL-7- or IL-7R-deficient mice.

CHROMOSOMAL LOCATION

Genetic locus: MCL1 (human) mapping to 1q21.3; Mcl1 (mouse) mapping to 3 F2.1.

SOURCE

Mcl-1 (H-260) is a rabbit polyclonal antibody raised against amino acids 1-260 mapping at the N-terminus of Mcl-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Mcl-1 (H-260) is recommended for detection of Mcl-1_L and Mcl-1_S of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Mcl-1 (H-260) is also recommended for detection of Mcl-1 in additional species, including equine.

Suitable for use as control antibody for Mcl-1 siRNA (h): sc-35877, Mcl-1 siRNA (m): sc-35878, Mcl-1 shRNA Plasmid (h): sc-35877-SH, Mcl-1 shRNA Plasmid (m): sc-35878-SH, Mcl-1 shRNA (h) Lentiviral Particles: sc-35877-V and Mcl-1 shRNA (m) Lentiviral Particles: sc-35878-V.

Molecular Weight of Mcl-1_L: 40 kDa.

Molecular Weight of Mcl-1_S: 32 kDa.

Positive Controls: Ramos cell lysate: sc-2216 or Mcl-1 (h): 293T Lysate: sc-176626.

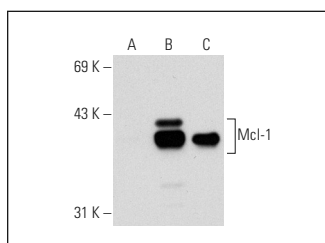
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

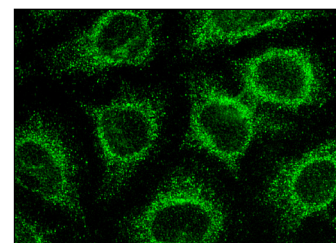
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Mcl-1 (H-260): sc-20679. Western blot analysis of Mcl-1 expression in non-transfected 293T: sc-117752 (A), human Mcl-1 transfected 293T: sc-176626 (B) and Ramos (C) whole cell lysates.



Mcl-1 (H-260): sc-20679. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Liu, H., et al. 2005. Mcl-1 is essential for the survival of synovial fibroblasts in rheumatoid arthritis. *J. Immunol.* 175: 8337-8345.
- Lopez, J., et al. 2012. Src tyrosine kinase inhibits apoptosis through the Erk1/2- dependent degradation of the death accelerator Bik. *Cell Death Differ.* 19: 1459-1469.
- Rödel, J., et al. 2012. Persistent Chlamydia trachomatis infection of HeLa cells mediates apoptosis resistance through a Chlamydia protease-like activity factor-independent mechanism and induces high mobility group box 1 release. *Infect. Immun.* 80: 195-205.
- de Queiroz Crusoe E., et al. 2012. Transcriptomic rationale for the synergy observed with dasatinib + bortezomib + dexamethasone in multiple myeloma. *Ann. Hematol.* 91: 257-269.
- Yi, Y.W., et al. 2013. Inhibition of the PI3K/AKT pathway potentiates cytotoxicity of EGFR kinase inhibitors in triple-negative breast cancer cells. *J. Cell. Mol. Med.* 17: 648-656.
- Boiani, M., et al. 2013. The stress protein BAG3 stabilizes Mcl-1 protein and promotes survival of cancer cells and resistance to antagonist ABT-737. *J. Biol. Chem.* 288: 6980-6990.
- Stefaniková, A., et al. 2013. ABT-737 accelerates butyrate-induced death of HL-60 cells. Involvement of mitochondrial apoptosis pathway. *Gen. Physiol. Biophys.* 32: 505-516.
- Pilchova, I., et al. 2015. Possible contribution of proteins of Bcl-2 family in neuronal death following transient global brain ischemia. *Cell. Mol. Neurobiol.* 35: 23-31.



Try **Mcl-1 (22): sc-12756** or **Mcl-1 (B-6): sc-74436**, our highly recommended monoclonal alternatives to Mcl-1 (H-260). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Mcl-1 (22): sc-12756**.