**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 PI3-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 (RC13) is a mouse monoclonal antibody raised against amino acids 1-327 of Mcl-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Mcl-1 (RC13) is recommended for detection of Mcl-1 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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 long form: 40 kDa.
Molecular Weight of Mcl-1 short form: 32 kDa.
Positive Controls: K-562 whole cell lysate: sc-2203, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

**STORAGE**

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

**DATA**

See Mcl-1 (22): sc-12756 for Mcl-1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.