Mcl-1 (RC13): sc-56152

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

PRODUCT
Each vial contains 200 μg IgG, 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-35787, Mcl-1 siRNA (m): sc-35787, Mcl-1 shRNA Plasmid (h): sc-35787-SH, Mcl-1 shRNA Plasmid (m): sc-35787-SH, Mcl-1 shRNA (h) Lentiviral Particles: sc-35787-V and Mcl-1 shRNA (m) Lentiviral Particles: sc-35787-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.

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

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

DATA

SELECT PRODUCT CITATIONS
3. Rubinstein, A.D., et al. 2011. The autophagy protein Atg12 associates with kappa light chain in 1.0 ml of PBS with < 0.1%

See Mcl-1 (22): sc-12756 for Mcl-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.