**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.

**SOURCE**

Mcl-1 (22) is a mouse monoclonal antibody raised against full length 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.

Mcl-1 (22) is available conjugated to agarose (sc-12756 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-12756 HRP), 200 µg/ml, for WB, IHC(+) and ELISA; to either phycoerythrin (sc-12756 PE), fluorescein (sc-12756 FITC), Alexa Fluor® 488 (sc-12756 AF488), Alexa Fluor® 546 (sc-12756 AF546), Alexa Fluor® 594 (sc-12756 AF594) or Alexa Fluor® 647 (sc-12756 AF647), 200 µg/ml, for WB (RGB), IF, IHC(+) and FCM; and to either Alexa Fluor® 568 (sc-12756 AF568) or Alexa Fluor® 790 (sc-12756 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Mcl-1 (22) is available conjugated to biotin (sc-12756 B), 200 µg/ml, for WB, IHC(+) and ELISA.

**APPLICATIONS**

Mcl-1 (22) is recommended for detection of Mcl-1 long and short forms of human 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:300-1:1000).

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

Molecular Weight of Mcl-1 long form: 40 kDa.

Molecular Weight of Mcl-1 short form: 32 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or JAR cell lysate: sc-2276.

**STORAGE**

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

**DATA**

Mcl-1 (22): sc-12756. Western blot analysis of Mcl-1 expression in BJAB (A), Ramos (B), JAR (C), K-562 (D) and Jurkat (E) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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