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MCL1 Antibody (BH3 Domain Specific)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1312a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q07820
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37337
Antigen Region	191-226

Additional Information

Gene ID	4170
Other Names	Induced myeloid leukemia cell differentiation protein Mcl-1, Bcl-2-like protein 3, Bcl2-L-3, Bcl-2-related protein EAT/mcl1, mcl1/EAT, MCL1, BCL2L3
Target/Specificity	This MCL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 191-226 amino acids from human MCL1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MCL1 Antibody (BH3 Domain Specific) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MCL1
Synonyms	BCL2L3
Function	Involved in the regulation of apoptosis versus cell survival, and in the

	maintenance of viability but not of proliferation. Mediates its effects by interactions with a number of other regulators of apoptosis. Isoform 1 inhibits apoptosis. Isoform 2 promotes apoptosis.
Cellular Location	Membrane; Single-pass membrane protein. Cytoplasm. Mitochondrion. Nucleus, nucleoplasm Note=Cytoplasmic, associated with mitochondria

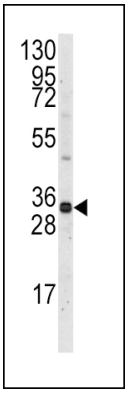
Background

The Mcl-1 protein belongs to the Bcl-2 family. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified. The longer gene product (isoform 1) enhances cell survival by inhibiting apoptosis while the alternatively spliced shorter gene product (isoform 2) promotes apoptosis and is death-inducing.

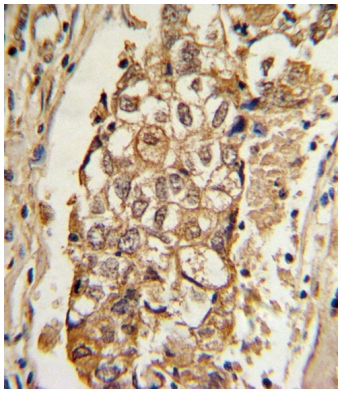
References

Crossley, L.J., J. Leukoc. Biol. 74(4):583-592 (2003).
Kotelkin, A., et al., J. Virol. 77(17):9156-9172 (2003).
Erwert, R.D., et al., Microb. Pathog. 35(2):87-93 (2003).
Liu, H., et al., Blood 102(1):344-352 (2003).
Nijhawan, D., et al., Genes Dev. 17(12):1475-1486 (2003).

Images

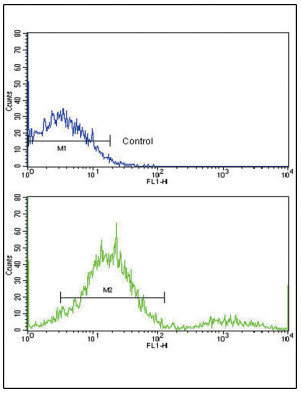


Western blot analysis of anti-Mcl-1 BH3 Domain Pab (Cat. #AP1312a) in Ramos cell line lysates (35ug/lane). Mcl-1-BH3(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma with MCL1 Antibody (BH3 Domain Specific), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of ZR-75-1 cells using MCL1 Antibody (BH3 Domain Specific)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Citations

- DNA methylation-regulated miR-193a-3p dictates resistance of hepatocellular carcinoma to 5-fluorouracil via repression of SRSF2 expression.
- Enforced Bcl-2 expression overrides serum and feeder cell requirements for mouse embryonic stem cell self-renewal.
- Characterization of the TCL-1 transgenic mouse as a preclinical drug development tool for human chronic lymphocytic leukemia.
- P-glycoprotein enhances radiation-induced apoptotic cell death through the regulation of miR-16 and Bcl-2 expressions in hepatocellular carcinoma cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.