

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                  |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Mcl-1 in direct ELISAs.                                                  |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 602901                                      |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                             |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Mcl-1<br>Met231-Arg350<br>Accession # Q07820 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm    |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                           |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                        |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Mcl-1 (myeloid cell leukemia-1) is a member of the Bcl-2 family of proteins. Alternative splicing creates two distinct isoforms. The 40 kDa, 350 amino acid (aa) isoform 1, also known as Mcl-1L (long), enhances cell survival by inhibiting apoptosis, while the ~35 kDa, 271 aa isoform 2, also known as Mcl-1S (short; with divergence in the last 41 aa) promotes apoptosis. The elimination of Mcl-1L is a required step for DNA damage-induced apoptosis. Mcl-1 can be modified by phosphorylation on S121 and T163 by JNK, which triggers apoptosis, or polyubiquitination, which enhances degradation. Within aa 231-350 (unique to Mcl-1L), human Mcl-1 shares 93% and 96% aa identity with mouse and rat Mcl-1, respectively.

## PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.