

## 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 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 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.

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