

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                             |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Perforin in direct ELISAs.                                          |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2A</sub> Clone # 1001103                                |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                        |
| <b>Immunogen</b>                                                                                                                                                                                        | Synthetic peptide containing human Perforin<br>Pro22-Trp555<br>Accession # P14222 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | 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

Perforin is a pore forming, cytolytic protein that is a component of cytolytic T-cell and NK cell granules. Perforin activates clathrin- and dynamin-dependent endocytosis, which removes perforin and granzymes from the plasma membrane to early endosomes, preserving outer membrane integrity. Perforin facilitates granzyme uptake and avoids the proinflammatory necrotic death of a membrane-damaged cell. Defects in the Perforin gene results in Familial hemophagocytic lymphohistiocytosis (FHL). Perforin-based effector systems are involved not only in the lysis of abnormal cells but also in the down-regulation of cellular immune activation.

## PRODUCT SPECIFIC NOTICES

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