

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Caspase-1 in direct ELISAs.                                                                                                                                                                                                                                   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 1021408                                                                                                                                                                                                                          |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Caspase-1<br>Asn120-Asp297<br>Accession # P29466                                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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>Knockout Validated</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA</b>               | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</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

Caspase-1, also known as IL-1 $\beta$ -Converting Enzyme (ICE), is an aspartic protease that plays a key role in the inflammatory response and apoptosis. Caspase-1 precursor (about 50kDa) can be cleaved and the active enzyme consists of a complex of two 20 kDa (aa 120-297) and two 10 kDa (aa 317-404) subunits which associate following cleavage of inactive precursors. Caspase-1 is required for proteolytic cleavage of the IL-1 $\beta$  precursor to form the active proinflammatory cytokine. Alternate splicing generates several additional Caspase-1 isoforms with deletions in the propeptide regions or also in the mature subunits. Within the large subunit, human Caspase 1 shares 61% aa sequence identity with mouse and rat Caspase-1.

## PRODUCT SPECIFIC NOTICES

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