

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse IL-5 in direct ELISAs and Western blots. Neutralizes the biological activity of recombinant mouse IL-5, but will not neutralize the biological activity of recombinant human IL-5. In direct ELISAs and Western blots, less than 5% cro                       |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse IL-5                                                                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 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>Neutralization</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</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

Interleukin 5 is a T cell-derived factor that promotes the proliferation, differentiation and activation of eosinophils. In mice, IL-5 has also been shown to be a growth and differentiation factor for B cells. Various names previously used to describe IL-5 include: T cell replacing factor (TRF), B cell growth factor II (BCGFII), B cell differentiation factor  $\mu$  (BCDF  $\mu$ ), eosinophil differentiation factor (EDF) and eosinophil colony-stimulating factor (E<sub>o</sub>-CSF). Biologically active IL-5 is a disulfide-linked homodimer. The cDNAs for murine and human IL-5 encode precursor proteins with signal peptides that are cleaved to form mature proteins containing 113 and 115 amino acid residues, respectively. Murine and human IL-5 are 70% identical in their amino acid sequences and show species cross-reactivity. The genes for human and mouse IL-5 have been mapped to chromosome 5 and chromosome 11, respectively; closely linked to the genes for IL-3, IL-4 and GM-CSF.

IL-5 exerts its activity on target cells by binding to specific cell surface receptors. The functional high-affinity receptor for human IL-5 has been shown to be composed of a low-affinity IL-5 binding  $\alpha$ -subunit and a non-binding common  $\beta$ -subunit that is shared with the high-affinity receptors for GM-CSF and IL-3.

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