

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human IL-5 in ELISAs and Western blots. In sandwich immunoassays, no cross-reactivity with recombinant human (rh) IL-3, rhGM-CSF, or recombinant mouse IL-5 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # JES1-5A10
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	COS-7 African green monkey SV40 transformed kidney fibroblast-like cell line-derived recombinant human IL-5
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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.

Human IL-5 Sandwich Immunoassay		Reagent
<b>ELISA Capture</b>	2-8 µg/mL	Human/Mouse IL-5 Antibody (Catalog # MAB405)
<b>ELISA Capture</b>	2-8 µg/mL	Human/Mouse IL-5 Antibody (Catalog # MAB405R)
<b>ELISA Detection</b>	0.5-2.0 µg/mL	Human IL-5 Biotinylated Antibody (Catalog # BAM6051)
<b>Standard</b>		Recombinant Human IL-5 (Catalog # 205-IL)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 µ (BCDF µ), 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 α-subunit and a non-binding common β-subunit that is shared with the high-affinity receptors for GM-CSF and IL-3.