

DESCRIPTION

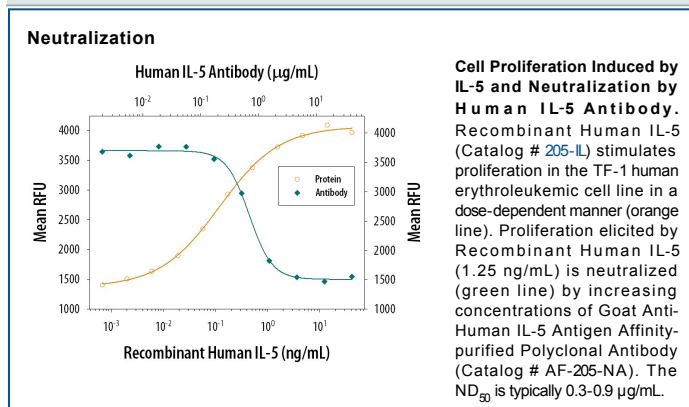
Species Reactivity	Human
Specificity	Detects human IL-5 in direct ELISAs and Western blots. In Western blots, approximately 25% cross-reactivity with recombinant mouse IL-5 is observed. Neutralizes the biological activity of recombinant IL-5 and will also neutralize the biological activity of recombinant mouse IL-5 at a 10-fold higher IgG concentration.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-5 Ile20-Ser134 Accession # P05113
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human IL-5 (Catalog # 205-IL)
Neutralization	Measured by its ability to neutralize IL-5-induced proliferation in the TF-1 human erythroleukemic cell line. Kitamura, T. <i>et al.</i> (1989) J. Cell Physiol. 140 :323. The Neutralization Dose (ND ₅₀) is typically 0.3-0.9 µg/mL in the presence of 1.25 ng/mL Recombinant Human IL-5.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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_o-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.