

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline IL-5 in direct ELISAs and Western blots. In direct ELISAs, approximately 80% cross-reactivity with recombinant bovine IL-5 and recombinant equine IL-5 is observed, approximately 50% cross-reactivity with recomb
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant feline IL-5 Ile20-Ser134 Accession # O77515
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 5 (IL-5) is a T cell-derived factor that promotes the proliferation, differentiation and activation of eosinophils. In mice, IL-5 is also a growth and differentiation factor for B cells (1-3). 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. As in human IL-5, the cDNA for cat IL-5 encodes a precursor protein with signal peptide that is cleaved to generate the secreted mature protein containing 115 amino acid (aa) residues. Feline IL-5 shares 70% and 59% aa sequence identity with human and mouse IL-5, respectively. IL-5 exerts its activity on target cells by binding to specific cell surface receptor complexes. The functional high-affinity receptor complex for IL-5 is composed of a ligand-binding α subunit that is specific for IL-5, and a non ligand-binding common β subunit that is required for signal transduction. The common β subunit is shared with the high-affinity receptor complexes for IL-3 and GM-CSF. In human, IL-5 Rα subunit is primarily expressed on eosinophils and basophils. During eosinophil development, IL-5 up-regulates the expression of IL-5 Rα. In contrast, in mature eosinophils, the expression of IL-5 Rα mRNA is down-regulated by IL-5, as well as by IL-3 and GM-CSF. Furthermore, IL-5 also down-modulates cell surface IL-5 Rα via a proteinase-mediated process that releases the soluble IL-5 Rα extracellular domain (4-6).

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