



# Goat Anti-Canine IL5 Polyclonal antibody (CABT-L964G)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| <b>Specificity</b>        | Detects canine IL-5 in direct ELISAs and Western blots. In Western blots, approximately 15% cross-reactivity with recombinant bovine IL-5, recombinant equine IL-5, and recombinant feline IL-5 is observed and less than 5% cross-reactivity with recombinant rat IL-5, recombinant mouse IL-5, and recombinant human IL-5 is observed. |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant canine IL-5. (aa 20-134)                                                                                                                                                                                                                                                                 |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                      |
| <b>Source/Host</b>        | Goat                                                                                                                                                                                                                                                                                                                                     |
| <b>Species Reactivity</b> | Dog                                                                                                                                                                                                                                                                                                                                      |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                                                                                |
| <b>Conjugate</b>          | Unconjugated                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>       | ELISA, WB, ICC, Neut<br>Recommended working concentration:<br>WB: 0.1 ug/ml; ICC: 5-15 ug/ml                                                                                                                                                                                                                                             |
| <b>Reconstitution</b>     | Reconstitute at 0.2 mg/mL in sterile PBS.                                                                                                                                                                                                                                                                                                |
| <b>Format</b>             | Lyophilized                                                                                                                                                                                                                                                                                                                              |
| <b>Size</b>               | 100 µg                                                                                                                                                                                                                                                                                                                                   |
| <b>Buffer</b>             | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.<br>Endotoxin Level <0.10 EU per 1 µg of the antibody by the LAL method.                                                                                                                                                                                               |

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| <b>Preservative</b> | None                                                                                               |
| <b>Storage</b>      | Maintain at -20°C for up to 12 months. Avoid repeated freeze-thaw cycles. Store product undiluted. |
| <b>Ship</b>         | Wet ice                                                                                            |

## BACKGROUND

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| <b>Introduction</b> | Interleukin-5 (IL-5) is a 40-45 kDa secreted disulfide-linked homodimeric glycoprotein that plays an important role in the differentiation, growth, and function of eosinophils. It also primes basophils for histamine and leukotriene release. In mice, IL-5 also induces the proliferation, differentiation, and immunoglobulin production of B cells especially B-1 cells that constitutively express IL-5 receptor alpha. IL-5 is primarily produced by CD4+ Th2 cells. Other cell types, including mast cells, visceral smooth muscle cells, bronchial epithelium, CD16+ NK cells, eosinophils and gamma δ T cells, can also produce IL-5. Canine IL-5 is synthesized as a 134 amino acid (aa) precursor that contains a 21 aa signal sequence and a 113 aa mature segment. Mature canine IL-5 shares 62%, 66%, 85%, 84%, 58%, and 56% aa sequence identity with mature human, guinea pig, porcine, feline, mouse, and rat IL-5, respectively. The receptor for IL-5 consists of a 60 kDa ligand-binding subunit (IL-5 R alpha ) and a 120 kDa signal-transducing subunit ( beta c). |
| <b>Keywords</b>     | BCDF mu; B-cell differentiation factor I; BCGFII; EDF; Eo-CSF; Eosinophil differentiation factor; IL5; IL-5; IL-5T-cell replacing factor; interleukin 5 (colony-stimulating factor, eosinophil); interleukin-5; TRF; TRFB cell differentiation factor I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |