



# Goat anti Canine IL6 polyclonal antibody [Biotin] (CABT-L128)

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

## PRODUCT INFORMATION

|                           |   |
|---------------------------|---|
| <b>Specificity</b>        | Detects canine IL-6 in ELISAs and Western blots. In sandwich immunoassays, less than 5% cross-reactivity with recombinant feline IL-6 and recombinant porcine IL-6 is observed and less than 0.2% cross-reactivity with recombinant human IL-6, recombinant mouse IL-6, recombinant rat IL-6, recombinant cotton rat IL-6, and recombinant equine IL-6 is observed. |
| <b>Target</b>             | IL-6  |
| <b>Immunogen</b>          | E. coli-derived recombinant canine IL-6, Thr23-Met207, Accession #P41323  |
| <b>Isotype</b>            | IgG   |
| <b>Source/Host</b>        | Goat  |
| <b>Species Reactivity</b> | Canine  |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Conjugate</b>          | Biotin  |
| <b>Applications</b>       | ELISA(Det), ICC/IF, WB  |
| <b>Reconstitution</b>     | Reconstitute at 0.2 mg/mL in sterile PBS.   |
| <b>Format</b>             | Lyophilized   |
| <b>Size</b>               | 50 µg   |
| <b>Buffer</b>             | PBS with BSA  |
| <b>Preservative</b>       | None  |

|                |   |
|----------------|---|
| <b>Storage</b> | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 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. |
| <b>Ship</b>    | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.   |

## BACKGROUND

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|---------------------|--|
| <b>Introduction</b> | Interleukin 6 (IL-6) is a pleiotropic alpha-helical cytokine that plays important roles in acute phase reactions, inflammation, hematopoiesis, bone metabolism, and cancer progression. IL-6 activity is central to the transition from acute inflammation to either acquired immunity or chronic inflammatory disease. It is secreted by multiple cell types as a 22-28 kDa phosphorylated and variably glycosylated molecule. Mature canine IL-6 is 187 amino acids (aa) in length and shares 76%, 59%, 38%, and 40% aa sequence identity with feline, human, mouse, and rat IL-6, respectively. IL-6 induces signaling through a cell surface heterodimeric receptor complex composed of a ligand binding subunit (IL-6 R) and a signal transducing subunit (gp130). IL-6 binds to IL-6 R, triggering IL-6 R association with gp130 and gp130 dimerization. gp130 is also a component of the receptors for CLC, CNTF, CT-1, IL-11, IL-27, LIF, and OSM. Soluble forms of IL-6 R are generated by both alternate splicing and proteolytic cleavage. In a mechanism known as trans-signaling, complexes of soluble IL-6 and IL-6 R elicit responses from gp130-expressing cells that lack cell surface IL-6 R. Trans-signaling enables a wider range of cell types to respond to IL-6, as the expression of gp130 is ubiquitous while that of IL-6 R is predominantly restricted to hepatocytes, leukocytes, and lymphocytes. Soluble splice forms of gp130 block trans-signaling from IL-6/IL-6 R but not from other cytokines that utilize gp130 as a coreceptor. |
| <b>Keywords</b>     | B cell stimulatory factor-2;B-cell differentiation factor;BSF-2;BSF2CTL differentiation factor;CDF;HGFHSFIFNB2Hybridoma growth factor;IFN-beta-2;IL6;IL-6;IL-6B-cell stimulatory factor 2;Interferon beta-2;interleukin 6 (interferon; beta 2);interleukin BSF-2;interleukin-6;MGI-2A  |

## GENE INFORMATION

|                       |                        |
|-----------------------|------------------------|
| <b>Entrez Gene ID</b> | <a href="#">403985</a> |
| <b>UniProt ID</b>     | <a href="#">P41323</a> |