



Goat anti Equine IL4 polyclonal antibody (CABT-L143)

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

PRODUCT INFORMATION

Specificity	Detects equine IL-4 in ELISAs and Western blots. In sandwich ELISAs, less than 0.7% cross-reactivity with recombinant human IL-4, recombinant mouse IL-4, recombinant rat IL-4, recombinant cotton rat IL-4, recombinant canine IL-4, recombinant feline IL-4, recombinant porcine IL-4, recombinant bovine IL-4, and recombinant rhesus macaque IL-4 is observed.
Target	IL-4
Immunogen	E. coli-derived recombinant equine IL-4, Lys26-Cys137, Accession #NP_001075988
Isotype	IgG
Source/Host	Goat
Species Reactivity	Equine
Purification	Antigen Affinity-purified
Conjugate	Unconjugated
Applications	ELISA(Cap), ICC/IF, WB
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized; Small package size(SP): Liquid
Size	100 µg
Buffer	PBS with Trehalose
Preservative	None

Storage	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.
Ship	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

BACKGROUND

Introduction	Interleukin-4 (IL-4), also known as B cell-stimulatory factor-1, is a monomeric, approximately 13-18 kDa Th2 cytokine that shows pleiotropic effects during immune responses. It is a glycosylated polypeptide that contains three intrachain disulfide bridges and adopts a bundled four alpha-helix structure. Equine IL-4 is synthesized with a 24 amino acid (aa) signal sequence. Mature equine IL-4 shares 53-60% aa sequence identity with bovine, goat, human, ovine, and porcine IL-4 and 38-40% aa sequence identity with mouse and rat IL-4. IL-4 exerts its effects through two receptor complexes. The type I receptor, which is expressed on hematopoietic cells, is a heterodimer of the ligand binding IL-4 R alpha and the common gamma chain (a shared subunit of the receptors for IL-2,-7,-9,-15, and-21). The type II receptor on non-hematopoietic cells consists of IL-4 R alpha and IL-13 R alpha 1. The type II receptor also transduces IL-13 mediated signals. IL-4 is primarily expressed by Th2-biased CD4+ T cells, mast cells, basophils, and eosinophils. It promotes cell proliferation, survival, and immunoglobulin class switch to IgE in B cells, acquisition of the Th2 phenotype by naïve CD4+ T cells, priming and chemotaxis of mast cells, eosinophils, and basophils, and the proliferation and activation of epithelial cells. IL-4 plays a dominant role in the development of allergic inflammation and asthma.
Keywords	B cell growth factor 1;BCDF;B-cell stimulatory factor 1;BCGF1;BCGF-1;binetrakin;BSF1;BSF-1;IL4;IL-4;IL-4B_cell stimulatory factor 1;interleukin 4;interleukin-4;Lymphocyte stimulatory factor 1;MGC79402;pitrakinra

GENE INFORMATION

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