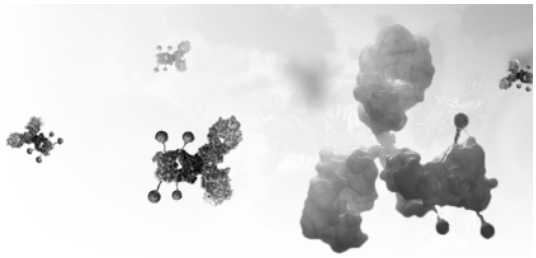

Mouse anti Rat IL4 monoclonal antibody, clone 67678 (CABT-L350)

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

PRODUCT INFORMATION

Specificity	Detects rat IL-4 in ELISAs and Western blots. Does not cross-react with recombinant human IL-4 or recombinant mouse IL-4.
Target	IL-4
Immunogen	E. coli-derived recombinant rat IL-4, Cys25-Ser147, Accession #P20096.2
Isotype	IgG2B
Source/Host	Mouse
Species Reactivity	Rat
Clone	67678
Purification	Protein A or G purified from ascites
Conjugate	Unconjugated
Applications	ELISA(Cap), WB
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Format	Lyophilized; Small package size(SP): Liquid
Size	100 µg, 500 µg
Buffer	PBS with Trehalose
Preservative	None

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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 kDa-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. Rat IL-4 is synthesized with a 24 aa signal sequence. Mature rat IL-4 shares 41%, 43%, and 59% aa sequence identity with bovine, human, and mouse IL-4, respectively. Human, mouse, and rat IL-4 are species-specific in their activities. 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 nonhematopoietic 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 IgG1 and IgE in rodent 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

Entrez Gene ID	287287
UniProt ID	P20096

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