Il-4 (IL4) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	IL-4 (IL4), Polyclonal Antibody
Full Product Name	Anti-IL-4 Antibody, Rabbit Polyclonal
Product Gene Name	anti-IL4 antibody
Product Synonym Names	IL-4/IL4/Interleukin-4 Antibody, Rabbit PAb; interleukin 4
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Canine
Form/Format	Liquid; 0.2um filtered solution in PBS
Purity/Purification	Protein A
Specificity	Canine IL-4/IL4/Interleukin-4
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Molecular Weight	15,267 Da
3D Structure	ModBase 3D Structure for O77762
Immunogen	Recombinant Canine IL-4/IL4/Interleukin-4 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Canine IL-4/IL4/Interleukin-4. Total IgG was purified by Protein A affinity chromatography.
Product Categories/Family for anti-IL4 antibody	Common G-Chain signaling pathway
Applications Tested/Suitable for anti-IL4 antibody	ELISA (EIA)
Application Notes for anti-IL4 antibody	ELISA: 1:1000-1:2000
Related Product Information for anti-IL4 antibody	Interleukin-4, also known as IL4, is a secreted protein that belongs to the IL-4/IL-13 family. Interleukin-4/IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. It enhances both secretion and cell surface expression of IgE and IgG1. Interleukin-4/IL4 also regulates the expression of the low-affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Interleukin-4 is essential for the switching of B cells to IgE antibody production and the maturation of T helper (Th) cells toward the Th2 phenotype. It participates in at least several B-cell activation processes as well as other cell types. However, studies show that double mutant (Q116D, Y119D) of the murine IL4 protein (QY), both glutamine 116 and tyrosine 119, which binds to the IL4 receptor alpha, completely inhibits in a dose-dependent manner the IL4-induced proliferation of lipopolysaccharide-stimulated murine splenic B-cells, of the murine T cell line CTLL-2, and the murine pre-B-cell line BA/F3. QY also inhibited the IL4-stimulated up-regulation of CD23 expression by lipopolysaccharide-stimulated murine splenic B-cells and abolished tyrosine phosphorylation of the transcription factor Stat6 and the tyrosine kinase Jak3 in IL4-stimulated BA/F3 cells.
Product References and Citations for anti-IL4 antibody	Grunewald SM. et al., 1998, J Immunol. 160 (8): 4004-9. Susanne M. et al, 1997, THE JOURNAL OF BIOLOGICAL CHEMISTRY. 272 (3): 1480-3. Nishikubo K. et al., 2003, Gene Ther. 10 (26): 2119-25.

Other Notes	Small volumes of anti-IL4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for IL4 purchase	MBS8112538 is an antibody targeting IL4. Also known as Anti-IL-4 Antibody, Rabbit Polyclonal. Reactive in Canine. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IL4. It may not necessarily be applicable to this product.

NCBI GI #	50978886
NCBI GeneID	403785
NCBI Accession #	NP_001003159.1
UniProt Primary Accession #	O77762
UniProt Secondary Accession #	A1E293
UniProt Related Accession #	O77762
GenBank Nucleotide #	NM_001003159.1
NCBI Official Full Name	interleukin-4
NCBI Official Synonym Full Names	interleukin 4
NCBI Official Symbol	IL4
NCBI Official Synonym Symbols	IL-4
UniProt Protein Name	Interleukin-4
UniProt Synonym Protein Names	B-cell stimulatory factor 1; BSF-1; Lymphocyte stimulatory factor 1
Protein Family	Interleukin
UniProt Gene Name	IL4
UniProt Synonym Gene Names	IL-4; BSF-1
NCBI Protein Information	interleukin-4
UniProt Comments for IL4	Participates in at least several B-cell activation processes as well as of other cell types. It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Positively regulates IL31RA expression in macrophages.
Research Articles on IL4	**1.** immunoreactivities of inflammatory cytokines, such as interleukin (IL)-2, its receptor (IL-2R), IL-4 and its receptor (IL-4R) in the cervical and lumbar spinal cord of young adult and aged beagle dogs, were compared.
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