

## ARG22549 anti-IL4 antibody [CC314] (Biotin)

Package: 100 µg  
Store at: 4°C

### Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [CC314] recognizes IL4 This antibody recognizes bovine interleukin-4 (IL-4), also known as B-cell stimulatory factor 1. IL-4 is expressed by a range of cells including T and B cells, macrophages and monocytes. It plays an important role in the regulation of bovine T and B cell responses. Bovine interleukin-4 is a 15 kDa, 135 amino acid peptide which is processed to a mature secreted form with the cleavage of a 24 amino acid, N-terminal signal peptide resulting in a 12.6 kDa active cytokine, the apparent Mw may be altered by glycosylation (Heussler et al. 1992). IL-4 is expressed by a range of cells including T and B cells, macrophages and monocytes. It plays an important role in the regulation of bovine T and B cell responses. Mouse anti Bovine interleukin-4, clone CC314 has been used successfully as a detection antibody in a sandwich ELISA with Mouse anti Bovine IL-4 antibody, clone CC313 as a coating reagent both with bovine (Stabel et al. 2011) and ovine samples (Olivier et al. 2012). Clones CC313 and CC314 have been used in the reverse configuration for the measurement of interleukin-4 in caprine samples (Marinaro et al. 2012).
Tested Reactivity	Bov, Goat, Sheep
Tested Application	ELISA
Host	Mouse
Clonality	Monoclonal
Clone	CC314
Isotype	IgG2b
Target Name	IL4
Species	Bovine
Immunogen	Recombinant bovine IL-4.
Conjugation	Biotin
Alternate Names	BSF-1; IL-4; B-cell stimulatory factor 1; BCGF1; Lymphocyte stimulatory factor 1; BCGF-1; Interleukin-4; Pittrakina; Binetrakin; BSF1

### Application Instructions

Application table	Application	Dilution
	ELISA	1 - 5 µg/ml
Application Note	FACS: Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.

Preservative	0.09% Sodium azide
Stabilizer	1% BSA
Concentration	1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol	IL4
Gene Full Name	interleukin 4
Background	The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]
Function	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. [UniProt]
Calculated Mw	17 kDa