

ARG22432 anti-IL12B / IL12 p40 antibody [CC301] (low endotoxin)

Package: 100 µg
Store at: -20°C

Summary

Product Description	Azide free and low endotoxin Mouse Monoclonal antibody [CC301] recognizes IL12B / IL12 p40. This antibody recognizes the p40 subunit of bovine interleukin-12, and binds to both the free subunit and the intact heterodimer. The p40 subunit is also known as IL-12B and can form a heterodimer with either IL-12A or IL-23A. Mouse anti Bovine Interleukin-12/23 antibody, clone CC301 may be used as a capture antibody in an ELISA in combination with biotinylated Mouse anti Bovine Interleukin-12/23 antibody, clone CC326 as a detection reagent.
Tested Reactivity	Hu, Bov, Sheep
Species Does Not React With	Ms
Tested Application	ELISA, ELISPOT, FACS, FuncSt, WB
Host	Mouse
Clonality	Monoclonal
Clone	CC301
Isotype	IgG2a
Target Name	IL12B / IL12 p40
Species	Bovine
Immunogen	Recombinant Bovine IL12B / IL12 p40.
Conjugation	Un-conjugated
Alternate Names	CLMF; Interleukin-12 subunit beta; NK cell stimulatory factor chain 2; NKSF; CLMF p40; NKSF2; Cytotoxic lymphocyte maturation factor 40 kDa subunit; CLMF2; IL-12 subunit p40; IMD29; IMD28; IL-12B

Application Instructions

Application table	Application	Dilution
	ELISA	8 µg/ml
	ELISPOT	Assay-dependent
	FACS	1:10
	FuncSt	1:100
	WB	1:50 - 1:100
Application Note	<p>FACS: Membrane permeabilisation is required for this application. Arigo recommends the use of Leucoperm for this purpose. Use 10 µl of the suggested working dilution to label 10⁶ cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

Properties

Form	Liquid
Purification	Purification with Protein A.
Purification Note	Low endotoxin
Buffer	PBS
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. 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

Gene Symbol	IL12B
Gene Full Name	interleukin 12B
Background	<p>This gene encodes a subunit of interleukin 12, a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. Interleukin 12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. This cytokine has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. The promoter polymorphism of this gene has been reported to be associated with the severity of atopic and non-atopic asthma in children. [provided by RefSeq, Jul 2008]</p>
Function	<p>Cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC.</p> <p>Associates with IL23A to form the IL-23 interleukin, a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naïve T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis. [UniProt]</p>
Calculated Mw	37 kDa
PTM	Known to be C-mannosylated in the recombinant protein; it is not yet known for sure if the wild-type protein is also modified.