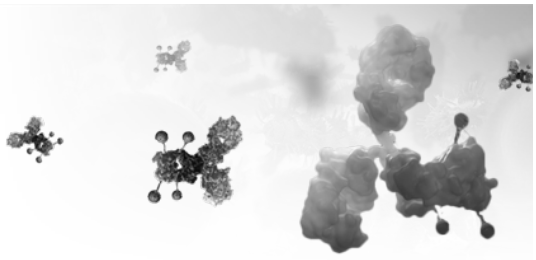

Rat Anti-Mouse IL-23 (p19) Monoclonal antibody, clone G23-8 (CABT-L4539)

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

PRODUCT INFORMATION

Product Overview	The G23-8 monoclonal antibody reacts with the p19 subunit of mouse IL-23. IL-23 is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-12. IL-23 is secreted by activated dendritic cells and macrophages. IL-23 has been shown to enhance IFNγ production by memory T cells. Additionally, mouse IL-23 induces the proliferation of memory T cells (but not naive T cells), whereas IL-12 has no effect on memory cells. Mouse IL-23 (but not IL-12) can also activate mouse memory T cells to produce the potent proinflammatory cytokine IL-17. IL-23 has been shown to be upregulated in certain autoimmune diseases and promote immunity in response to some viral and mycobacterial infections. The G23-8 antibody can specifically neutralize IL-23 bioactivity with no effect on IL-12 p70 bioactivity.
Target	Mouse IL-23 (p19)
Immunogen	Insect cell-expressed, recombinant mouse IL-23 heterodimer
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	G23-8
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo IL-23p19 neutralization, in vitro IL-23p19 neutralization, WB

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Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	This gene encodes a subunit of the heterodimeric cytokine interleukin 23 (IL23). IL23 is composed of this protein and the p40 subunit of interleukin 12 (IL12B). The receptor of IL23 is formed by the beta 1 subunit of IL12 (IL12RB1) and an IL23 specific subunit, IL23R. Both IL23 and IL12 can activate the transcription activator STAT4, and stimulate the production of interferon-gamma (IFNG). In contrast to IL12, which acts mainly on naive CD4(+) T cells, IL23 preferentially acts on memory CD4(+) T cells. IL-23 associates with IL12B to form the IL-23 interleukin, a heterodimeric cytokine that 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 naive 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. IL-23 forms disulfide-linked heterodimer with IL12B. The heterodimer is known as interleukin IL-23 and is secreted by activated dendritic and phagocytic cells and keratinocytes. Interleukin IL-23 is expressed by dermal Langerhans cells (at protein level), up-regulated by a wide array of pathogens and pathogen-products together with self- signals for danger or injury, and up-regulated in psoriatic dermal tissues, in dendritic cells of multiple sclerosis patients and in tumors.
Keywords	IL23A;UNQ2498/PRO5798;IL-23A;IL23P19;P19;SGRF;IL-23 subunit alpha;IL-23-A;IL-23p19;JKA3 induced upon T-cell activation;interleukin 23 p19 subunit;interleukin-23 subunit alpha;interleukin-23 subunit p19;interleukin-six, G-CSF related factor

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GENE INFORMATION

Official Symbol	Marmoset interleukin IL-23
Synonyms	IL23A; UNQ2498/PRO5798; IL-23A; IL23P19; P19; SGRF; IL-23 subunit alpha; IL-23-A; IL-23p19; JKA3 induced upon T-cell activation; interleukin 23 p19 subunit; interleukin-23 subunit alpha; interleukin-23 subunit p19; interleukin-six, G-CSF related factor

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