

## Ultra-LEAF™ Purified anti-mouse IL-23 (p19) Antibody

<b>Catalog# / Size</b>	513807 / 100 µg 513808 / 1 mg
<b>Clone</b>	MMp19B2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin 23 p19/p40, P19, IL-23A, IL23P19
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	Interleukin 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 macrophages and dendritic cells. Human and mouse p19 share 70% aa sequence identity. The functional IL-23 receptor complex consists of two receptor subunits, a β1 subunit shared with the IL-12 receptor (IL-12R β1) and a β2-like subunit with STAT4 binding domain, termed the IL-23-specific receptor subunit (IL-23R). IL-23 has been shown to enhance IFN-γ production by memory T cells. Additionally, mouse IL-23 (but not IL-12) can 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.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Mouse p19 C-terminal peptide
<b>Formulation</b>	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<b>Application</b>	<a href="#">Neut - Quality tested</a> <a href="#">ELISA-C, ICC - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by neutralization of mouse IL-23 (5 ng/ml) in mouse splenocytes.
<b>Application Notes</b>	ELISA Capture: The purified MMP19B2 antibody is useful as a capture antibody for a sandwich ELISA assay, when used in conjunction with the biotinylated C17.8 antibody as detection antibody.
<b>Application References</b>	1. Keswani T, <i>et al.</i> 2014. <i>Exp Parasitol.</i> 141:82. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2801103 (BioLegend Cat. No. 513807) AB_2801104 (BioLegend Cat. No. 513808)

### Antigen Details

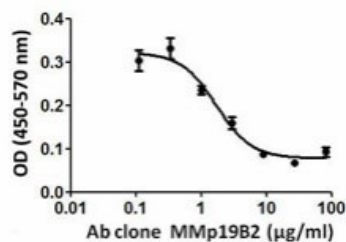
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<b>Structure</b>	Member of the IL-12 cytokine family, heterodimeric cytokine composed of p40 subunit shared with IL-12 and a specific p19 subunit
<b>Distribution</b>	Secreted by activated dendritic cells and macrophages.
<b>Function</b>	Upregulated in viral infections, increased in psoriatic lesions and promotes immunity to mycobacteria.
<b>Ligand/Receptor</b>	IL-23 receptor ( $\beta$ 1 subunit of IL-12 receptor and IL-23-specific subunit)
<b>Bioactivity</b>	Enhances IFN- $\gamma$ secretion by memory (CD45RO) T cells and induces unique Th subset (designated Th-17) secreting IL-17.
<b>Cell Type</b>	Dendritic cells, Macrophages
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Oppmann B, <i>et al.</i> 2000. <i>Immunity</i> 13:715.</li> <li>2. Parham C, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:5448.</li> <li>3. Aggarwal S, <i>et al.</i> 2003. <i>J. Biol. Chem.</i> 278:1910.</li> <li>4. Verreck FA, <i>et al.</i> 2004. <i>Proc. Natl. Acad. Sci. USA</i> 101:4560.</li> <li>5. Lee E, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 199:125.</li> </ol>
<b>Gene ID</b>	<a href="#">83430</a>

## Other Formats

Purified anti-mouse IL-23 (p19), Ultra-LEAF™ Purified anti-mouse IL-23 (p19)

## Product Data



IL-23 mediated secretion of IL-17A is inhibited by anti IL-23 clone MMp19B2. The data was generated from PMA 2.5 ng/ml and IL-2 20 ng/ml activated splenocytes (Balb/c), also treated with 5 ng/ml of recombinant IL-23 for 72 hours.

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