

## Purified anti-human CXCL10 (IP-10) Antibody

<b>Catalog# / Size</b>	524401 / 50 µg 524402 / 500 µg
<b>Clone</b>	J036G3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interferon gamma-inducible protein 10 (IP10), Interferon gamma induced factor, gIP-10, IFI10, INP10
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	CXCL10 is an ELR-negative chemokine structurally and functionally related to CXCL9 and CXCL11. CXCL10, CXCL9, and CXCL11 are produced and secreted by monocytes, macrophages, fibroblasts, and epithelial cells upon stimulation with proinflammatory cytokines, especially IFN $\gamma$ . CXCL10 chemoattracts CD4, CD8, and NK and NKT cells through the binding to its receptor CXCR3, which is shared with CXCL9 and CXCL11. In addition, CXCL10 inhibits neovascularization in tumors and in wound healing <i>in vivo</i> . Also, CXCL10 has anti-proliferative effects on endothelial cells <i>in vitro</i> , and angiostatic and antitumor effects <i>in vivo</i> . It has been suggested that the anti-proliferative effect of CXCL10 in endothelial cells is CXCR3-independent and that it is mediated through GAG interaction. CXCL10 also possesses antimicrobial activity against <i>E. coli</i> and <i>L. monocytogenes</i> , and both the spore and bacillus forms of <i>B. anthracis</i> . CXCL10 expression is strongly upregulated in many human inflammatory diseases, including rheumatoid arthritis, type I diabetes, multiple sclerosis, atherosclerosis, allograft rejection, and others.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant human CXCL10
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">ELISA Capture - Quality tested</a> <a href="#">WB - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">ELISA assay</a> . For ELISA capture applications, a concentration range of 1-4 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of CXCL10 (IP-10) recombinant protein ranging from 2000 to 31.3 pg/ml are recommended for each ELISA plate. For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	<b>ELISA Capture:</b> The purified J036G3 antibody is useful as the capture antibody in a sandwich ELISA assay, when used in conjunction with the biotinylated Poly5194 antibody (Cat. No. 519403) as the detecting antibody and recombinant human CXCL10 (IP-10) (Cat. No. 573509) as the standard.  <b>Note:</b> For testing human CXCL10 (IP-10) in serum, plasma or supernatant, BioLegend's ELISA LEGEND MAX™ Kits (Cat. No. 439907 & 439908) are specially developed and recommended.
<b>Product Citations</b>	1. Gruber CN, <i>et al.</i> 2020. Cell. 183:982. <a href="#">PubMed</a>
<b>RRID</b>	AB_2562398 (BioLegend Cat. No. 524401)

## Antigen Details

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<b>Structure</b>	Chemokine
<b>Distribution</b>	Interferon gamma-stimulated keratinocytes, monocytes, macrophages, fibroblasts, endothelial, T cells
<b>Function</b>	CXCL10 chemoattracts CD4, Th1, CD8, NK, and NKT cells. CXCL10 is induced by inflammatory cytokines, and NH <sub>2</sub> -terminal cleavage of CXCL10 by DPP-IV/CD26 impairs its chemoattracting capacity and CXCR3 signaling.
<b>Interaction</b>	Activated T cells, Th1 cells, regulatory T cells, NK cells, NKT cells, endothelial cells, fibroblasts, endothelial cells
<b>Ligand/Receptor</b>	CXCR3
<b>Cell Type</b>	Monocytes, Macrophages, Fibroblasts, Endothelial cells, T cells
<b>Biology Area</b>	Cell Biology, Neuroinflammation, Neuroscience
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Luster AD, <i>et al.</i> 1985. <i>Nature</i> 315:672.</li><li>2. Loos T, <i>et al.</i> 2008. <i>Blood</i> 112:2648.</li><li>3. Crawford MA, <i>et al.</i> 2009. <i>Infect. Immun.</i> 77:1664.</li><li>4. Campanella GS, <i>et al.</i> 2010. <i>PLoS One</i> 5:e12700.</li><li>5. Hoerning A. 2011. <i>Eur. J. Immunol.</i> 41:2291.</li></ol>
<b>Gene ID</b>	<a href="#">3627</a>

## Related Protocols

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[Active Protocols: Sandwich ELISA - Video](#)

[Western Blotting Protocol](#)

[Sandwich ELISA Protocol](#)

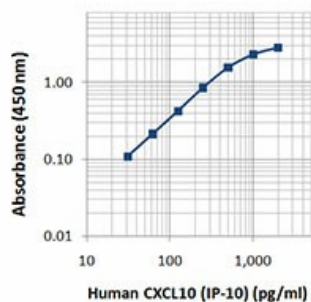
## Other Formats

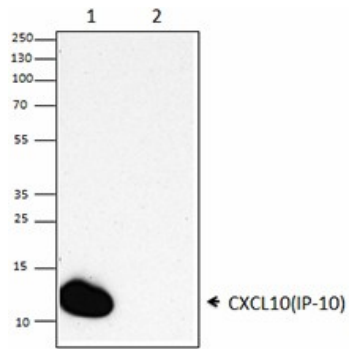
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Purified anti-human CXCL10 (IP-10)

## Product Data

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Western blot analysis of 50 ng of recombinant human CXCL10 (IP-10) (lane 1) and 50 ng of recombinant mouse CXCL10 (IP-10) (lane 2) using anti-human CXCL10 (IP-10) (clone J036G3) antibody.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587