

## Purified anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer) Antibody

<b>Catalog# / Size</b>	505201 / 50 µg 505202 / 500 µg
<b>Clone</b>	C15.6
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin-12 p40, Interleukin-23 p40, Cytotoxic lymphocyte maturation factor (CLMF), Natural killer cell stimulatory factor (NKSF), CTL maturation factor (TcMF), T-cell stimulating factor (TSF)
<b>Isotype</b>	Rat IgG1, κ
<b>Description</b>	The C15.6 antibody reacts with mouse IL-12 p40 subunit of the IL-12 p70 and IL-23 p40 subunit of the IL-23 p19/p40, as well as p40 monomer and homodimer, or heterodimer. The C15.6 antibody can not neutralize the bioactivity of natural or recombinant IL-12.

### Product Details

<b>Verified Reactivity</b>	Mouse, IL-12/IL-23 p40 subunit (monomer, homodimer and heterodimer IL-12 p35/p40 or IL-23 p19/p40)
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	CHO-expressed, recombinant mouse IL-12 p70
<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="#">IHC-F, IP, WB - Reported in the literature, not verified in house</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 1.0 - 4.0 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of IL-12 recombinant protein ranging from 250 to 2 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	<b>ELISA or ELISPOT Capture<sup>1,2,4,6,8,10</sup>:</b> The purified C15.6 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated C17.8 (Cat. No. 505302) antibody as the detecting antibody. This assay detects p40 as monomer, homodimer, or heterodimer complexed with p35. The LEAF™ purified antibody is suggested for ELISPOT capture. <b>Additional reported applications (for the relevant formats) include:</b> immunohistochemical staining <sup>9</sup> of paraformaldehyde-fixed saponin-treated frozen tissue sections, immunoprecipitation <sup>3</sup> , and Western blotting <sup>3</sup> . <b>Note:</b> For testing mouse IL-12 p40 (monomer, dimer, heteromer) in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 431601 to 431606) are specially developed and recommended.

### Application References

(PubMed link indicates BioLegend citation)

1. Kitagaki K, *et al.* 2002. *Clin. Diagn. Lab Immunol.* 9:1260.
2. Reichmann G, *et al.* 1999. *J. Immunol.* 163:3354.
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4. Gately M. 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.16.
5. Macatonia S, *et al.* 1995. *J. Immunol.* 154:5071.
6. O'Connell PJ, *et al.* 2006. *Blood* 107:1010.
7. Akilov OE, *et al.* 2007. *J. Leukocyte Biol.* 2007;10.1189/jlb.0706439.
8. Dzhagalov I, *et al.* 2007. *J. Immunol.* 178:2113.
9. Huang LY, *et al.* 2001. *J. Immunol.* 167:1423.

10. Xu G, *et al.* 2007. *J. Immunol.* 179:5358. [PubMed](#)
11. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
12. Malu DT, *et al.* 2011. *J. Immunol.* 186:6271. [PubMed](#)

#### Product Citations

1. Li H, *et al.* 2018. *Nat Commun.* 9:2830. [PubMed](#)
2. Pushalkar S, *et al.* 2018. *Cancer Discov.* 0.613194444. [PubMed](#)
3. Xu G, *et al.* 2007. *J Immunol.* 179:5358. [PubMed](#)
4. Malu D, *et al.* 2011. *J Immunol.* 186:6271. [PubMed](#)

#### RRID

AB\_315365 (BioLegend Cat. No. 505201)  
AB\_315366 (BioLegend Cat. No. 505202)

## Antigen Details

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<b>Structure</b>	Cytokine; monomer, heterodimer (p40:p35 or p40:p19) or homodimer (p40:p40)
<b>Bioactivity</b>	IL-12 p70 (p40:p35) induces IFN- $\gamma$ , TNF- $\alpha$ production in T and NK cells; costimulation of PBL proliferation; proliferation/differentiation of T <sub>H</sub> 1 T lymphocytes. IL-23 (p40:p19) induces proliferation and production of IFN- $\gamma$ by human me
<b>Cell Sources</b>	Dendritic cells, monocytes/macrophages, B cells, T cells
<b>Cell Targets</b>	T cells, NK cells
<b>Receptors</b>	IL-12R $\beta$ 1 binds p40; dimeric with IL-12R $\beta$ 2 binds p35
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook</i>. Academic Press, San Diego.</li><li>2. Quesniaux V. 1992. <i>Research Immunol.</i> 143:385.</li><li>3. Trinchieri G, <i>et al.</i> 1992 <i>Prog. Growth Factor Res.</i> 4:355.</li><li>4. Trinchieri G, <i>et al.</i> 1993 <i>Immunol. Today.</i> 14:335.</li><li>5. Oppmann B, <i>et al.</i> 2000 <i>Immunity.</i> 13:715.</li><li>6. Aggarwal S, <i>et al.</i> 2003 <i>J. Biol. Chem.</i> 278:1910.</li><li>7. Parham C, <i>et al.</i> 2002 <i>J. Immunol.</i> 168:5699.</li><li>8. Belladonna ML, <i>et al.</i> 2002 <i>J. Immunol.</i> 168:5448.</li><li>9. Lankford, CS, <i>et al.</i> 2003 <i>J. Leukocyte Biol.</i> 73:49.</li></ol>
<b>Regulation</b>	Downregulated by IL-10; homodimeric p40 antagonistic to functional p70 heterodimer; p40 monomer has no function; p40 subunit in common with IL-23
<b>Gene ID</b>	<a href="#">16160</a>

## Related Protocols

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

[Sandwich ELISA Protocol](#)

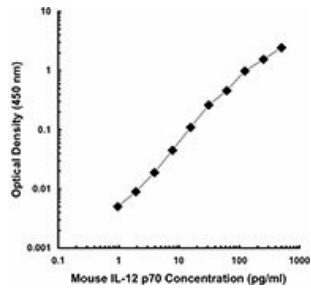
## Other Formats

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PE/Cyanine7 anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer), PerCP/Cyanine5.5 anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer), Alexa Fluor® 700 anti-mouse IL-12/IL-23 p40, APC anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer), PE anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer), Purified anti-mouse IL-12/IL-23 p40 (monomer, dimer, heterodimer)

## Product Data

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