

## Technical Data Sheet

**Purified NA/LE Mouse Anti-Human IL-12 (p40/p70)****Product Information**

<b>Material Number:</b>	<b>554659</b>
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Clone:</b>	C8.6
<b>Immunogen:</b>	Purified p40 Subunit of Human IL-12
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 $\mu$ m sterile filtered. Endotoxin level is $\leq 0.01$ EU/ $\mu$ g ( $\leq 0.001$ ng/ $\mu$ g) of protein as determined by the LAL assay.

**Description**

The C8.6 antibody reacts with human IL-12 p40 monomers, homodimers, and p70 heterodimers, but not p35 subunits. The immunogen used to generate the C8.6 hybridoma was the purified p40 subunit of human IL-12. The C8.6 antibody is a neutralizing antibody and has been reported to strongly inhibit three different biological activities of IL-12 (i.e., IFN- $\gamma$  induction), mitogenic effects on PHA blasts, and enhancement of NK cell-mediated cytotoxicity. C8.6 has been shown to immunoprecipitate IL-23.

**Preparation and Storage**

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

**Application Notes****Application**

ELISA	Routinely Tested
Neutralization	Tested During Development

**Neutralization Activity:**

This antibody has been reported to be useful for the neutralization of human IL-12 (p70) bioactivity. Neutralization may be measured with a proliferation assay using 200 pg/mL recombinant human IL-12 (p70) (Cat. No. 554613) to stimulate human PBMC as indicator cells (i.e. preincubation of the antibody with recombinant human IL-12 (p70) for 60 minutes).

50% Neutralization (ND50) at 10 - 300 ng/mL

$\geq 95\%$  Neutralization at 1 - 20  $\mu$ g/mL

**Recommended Assay Procedure:**

**ELISA (IL-12 p70 Detection):** The Biotin Mouse Anti-Human IL-12 (p40/p70) (Clone C8.6, Cat. No. 554660) antibody is useful as a detection antibody in sandwich ELISA for measuring human IL-12 (p70). Biotinylated C8.6 antibody can be paired with the Purified Rat Anti-Human IL-12 p70 mAb (Clone 20C2, Cat. No. 555065) as the capture antibody and recombinant human IL-12 (p70) protein (Cat. No. 554613) as the standard. For testing human IL-12 (p70) in complex biological fluids, such as serum or plasma, investigators are highly encouraged to use the BD OptEIA™ Human IL-12 (p70) ELISA Set (Cat. No. 555183).

**ELISA (IL-12 p40 Detection):** The Biotin Mouse Anti-Human IL-12 (p40/p70) (Clone C8.6, Cat. No. 554660) antibody is useful as a detection antibody in sandwich ELISA for measuring human IL-12 (p40). Biotinylated C8.6 antibody can be paired with the Purified Mouse Anti-Human IL-12 (p40) mAb (Clone C8.3, Cat. No. 551227) as the capture antibody with recombinant human IL-12 (p40) protein (Cat. No. 554633) as the standard. For testing human IL-12 (p40) in complex biological fluids, such as serum or plasma, investigators are highly encouraged to use the BD OptEIA™ Human IL-12 (p40) ELISA Set (Cat. No. 555171).

**Suggested Companion Products**

Catalog Number	Name	Size	Clone
554721	Purified NA/LE Mouse IgG1 $\kappa$ Isotype Control	0.5 mg	107.3
554660	Biotin Mouse Anti-Human IL-12 (p40/p70)	0.5 mg	C8.6
555065	Purified Rat Anti-Human IL-12 p70	0.5 mg	20C2
554613	Recombinant Human IL-12 (p70)	5 $\mu$ g	(none)
555183	Human IL-12 (p70) ELISA Set	20 plates	(none)

**BD Biosciences**

[bdbiosciences.com](http://bdbiosciences.com)

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



551227	Purified Mouse Anti-Human IL-12 (p40)	1.0 mg	C8.3
554633	Recombinant Human IL-12 p40	5 µg	(none)
555171	Human IL-12 (p40) ELISA Set	20 plates	(none)

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

## References

D'Andrea A, Aste-Amezaga M, Valiante NM, Ma X, Kubin M, Trinchieri G. Interleukin 10 (IL-10) inhibits human lymphocyte interferon gamma-production by suppressing natural killer cell stimulatory factor/IL-12 synthesis in accessory cells. *J Exp Med.* 1993; 178(3):1041-1048. (Clone-specific: Neutralization)

D'Andrea A, Rengaraju M, Valiante NM, et al. Production of natural killer cell stimulatory factor (interleukin 12) by peripheral blood mononuclear cells. *J Exp Med.* 1992; 176(5):1387-1398. (Clone-specific: Neutralization)

Oppmann B, Lesley R, Blom B, et al. Novel p19 protein engages IL-12p40 to form a cytokine, IL-23, with biological activities similar as well as distinct from IL-12. *Immunity.* 2000; 13(5):715-725. (Clone-specific: Immunoprecipitation)

## BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

*Conditions: The information disclosed herein is not to be constructed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.*

*For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.*

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

