

## Technical Data Sheet

Purified Mouse Anti-Human IFN- $\gamma$ 

## Product Information

<b>Material Number:</b>	<b>551221</b>
<b>Size:</b>	1.0 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Clone:</b>	NIB42
<b>Immunogen:</b>	Recombinant human IFN- $\gamma$
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The NIB42 antibody reacts with human interferon-gamma (IFN- $\gamma$ ). The immunogen used to generate the NIB42 hybridoma was recombinant human IFN- $\gamma$ . This is a neutralizing antibody.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.  
Store undiluted at 4° C.

## Application Notes

## Application

ELISA Capture	Routinely Tested
Neutralization	Tested During Development
Western blot	Not Recommended

## Recommended Assay Procedure:

**ELISA Capture:** The purified NIB42 antibody (Cat. No. 551221) is useful as a capture antibody for a sandwich ELISA for measuring human IFN- $\gamma$  protein levels. The purified NIB42 antibody can be paired with the biotinylated 4S.B3 antibody (Cat. No. 554550) as the detection antibody, with recombinant human IFN- $\gamma$  (Cat. No. 554617 or Cat. No. 554616) as the standard. Purified NIB42 antibody should be titrated 2.0 - 6.0  $\mu$ g/ml to determine optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of IFN- $\gamma$  standard ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology please visit the protocols sections or the chapter on ELISA in the Immune Function Handbook, both of which are posted on our web site, [www.bdbiosciences.com](http://www.bdbiosciences.com).

**Note 1:** This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems. These ELISA reagents are not recommended for assay of serum or plasma samples. For measuring human IFN- $\gamma$  in serum or plasma our BD OptEIA™ ELISA Set (Cat. No. 555142) or BD OptEIA™ ELISA Kit (Cat. No. 550612) are specially formulated and recommended.

**Note 2:** This ELISA pair shows no cross-reactivity with any of the cytokines or chemokines tested (eg human IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, lymphotactin, MCP-1, MCP-2, MIP-1 $\alpha$ , MIP-1 $\beta$ , NT-3, PDGF-AA, sCD23, SCF, TNF, LT- $\alpha$ , VEGF; mouse IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-10, IL-12 p70, IL-15, GM-CSF, IFN- $\gamma$ , MCP-1, TCA-3, TNF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN- $\gamma$ , TNF).

**Neutralization:** The no azide/low endotoxin (NA/LE™) format of the NIB42 antibody (Cat. No. 554547) is useful for neutralization of human IFN- $\gamma$  bioactivity. A suitable NA/LE mouse IgG1 isotype control to match the NIB42 antibody is the 107.3 antibody, (Cat. No. 554721).

**WB:** The NIB42 antibody is not recommended for Western blotting.

## BD Biosciences

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

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit [www.bdbiosciences.com/how\\_to\\_order/](http://www.bdbiosciences.com/how_to_order/)

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.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



## Suggested Companion Products

Catalog Number	Name	Size	Clone
554550	Biotin Mouse Anti-Human IFN- $\gamma$	0.5 mg	4S.B3
554616	Recombinant Human IFN- $\gamma$	25 $\mu$ g	(none)
554617	Recombinant Human IFN $\gamma$	50 $\mu$ g	(none)
555142	Human IFN- $\gamma$ ELISA Set	20 tests	(none)
550612	Human IFN- $\gamma$ ELISA Kit II	2 plates	(none)
554547	Purified NA/LE Mouse Anti-Human IFN- $\gamma$	each	B27

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

Meager A. Characterization of interferons and immunoassays. In: Clemens MJ, Morris AG, Gearing AJH, ed. *Lymphocytes and Interferons. A Practical Approach*. Oxford: IRL Press Ltd; 1987:105-127.(Clone-specific: Neutralization)