

IFN gamma Monoclonal Antibody (NIB42), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Human
Published Species	Human
Host/Isotope	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	NIB42
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage Conditions	4° C
RRID	AB_469250

Applications	Tested	Dilution	Published
Neutralization (Neu)	✓	Assay-Dependent	3 Publications
Functional Assay (FN)	✓	Assay-Dependent	3 Publications
Inhibition Assays (IA)	-		1 Publication
ELISA (ELISA)	✓	5 µg/mL	1 Publication
Flow Cytometry (Flow)	-		1 Publication
Immunofluorescence (IF)	-		1 Publication
Western Blot (WB)	-		1 Publication

Product Specific Information

Description: The NIB42 antibody reacts with human interferon-gamma (IFN-gamma). The NIB42 antibody is a neutralizing antibody. IFN-gamma is an ~20 kDa factor produced by activated T, B and NK cells and is an anti-viral and anti-parasitic cytokine. IFN-gamma in synergy with other cytokines, such as TNF-alpha, inhibits proliferation of normal and transformed cells. Immunomodulatory effects of IFN-gamma are exerted on a wide range of cell types expressing the high affinity receptors for IFN-gamma. Glycosylation of IFN-gamma does not affect its biological activity.

Applications Reported: The NIB42 antibody has been reported for use in neutralization of human IFN gamma and for ELISA capture.

Applications Tested: The Functional Grade Purified NIB42 antibody has been tested by LAL assay to verify low endotoxin levels and has been tested for ELISA capture and in bioassay for neutralization of IFN gamma bioactivity. The NIB42 antibody at 5 µg/mL has been found to inhibit by 50% the biological effects of 1 ng/mL human IFN gamma(ND50), in an EMCV assay of A549 cell protection. Detailed information and protocols about cytokine bioassays and in vitro cytokine neutralization using antibodies can be found in the BestProtocols® section.

The NIB42 antibody has been tested as the capture antibody in a sandwich ELISA for analysis of human Interferon-gamma (IFN-g) in combination with the biotin 4S.B3 (13-7319) antibody for detection and recombinant human IFNg (39-8319) as the standard. A suitable range of concentrations of this antibody for ELISA capture is 2-8 µg/mL. A standard curve consisting of doubling dilutions of the recombinant standard over the range of 1000 pg/mL - 8 pg/mL should be included in each ELISA plate. For ELISPOT capture, the alternative clone MD-1 is recommended.

Endotoxin: Less than 0.001 ng/ug antibody as determined by the LAL assay.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

11 References

Neutralization (3)

The American journal of pathology

Interferon- Released by Activated CD8⁺ T Lymphocytes Impairs the Calcium Resorption Potential of Osteoclasts in Calcified Human Aortic Valves.

Authors: Nagy E, Lei Y, Martínez-Martínez E, Body SC, Schlotter F, Creager M, Assmann A, Khabbaz K, Libby P, Hansson GK, Aikawa E

Species
Human

Dilution
Not Cited

Year
2017

American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons

Th17 Responses to Collagen Type V, k1-Tubulin, and Vimentin Are Present Early in Human Development and Persist Throughout Life.

"16-7318 was used in Functional assays to investigate the basis of the T helper 17-dependent autoimmune responses associated with fibro-obliterative forms of chronic rejection following heart or lung transplantation."

Authors: Sullivan JA, Jankowska-Gan E, Hegde S, Pestrak MA, Agashe VV, Park AC, Brown ME, Kernien JF, Wilkes DS, Kaufman DB, Greenspan DS, Burlingham WJ

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2017

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Functional Assay (3)

American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons

Th17 Responses to Collagen Type V, k1-Tubulin, and Vimentin Are Present Early in Human Development and Persist Throughout Life.

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Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2017

American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons

Differential requirement for P2X7R function in IL-17 dependent vs. IL-17 independent cellular immune responses.

"Published figure using IFN gamma monoclonal antibody (Product # 16-7318-81) in Neutralization"

Authors: Sullivan JA, Jankowska-Gan E, Shi L, Roenneburg D, Hegde S, Greenspan DS, Wilkes DS, Denlinger LC, Burlingham WJ

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2014

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More applications with references on thermofisher.com

[IA \(1\)](#) [ELISA \(1\)](#) [Flow \(1\)](#) [IF \(1\)](#) [WB \(1\)](#)

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