

Technical Data Sheet

Purified NA/LE Mouse Anti-Human IFN- α [2b]

Product Information

Material Number:	551795
Alternate Name:	IFNa, IFN α
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	7N4-1
Immunogen:	Human IFN- α 2b
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 μ m sterile filtered. Endotoxin level is \leq 0.01 EU/ μ g (\leq 0.001 ng/ μ g) of protein as determined by the LAL assay.

Description

The 7N4-1 antibody reacts with human IFN- α 2b and to a lesser extent with IFN- α 7. It does not react with IFN- α 1 nor IFN- α 4. IFN- α 2b is one of the three variants of IFN- α 2 that have been isolated from human cell lines. IFN- α 2b is the variant predominantly produced by human leukocytes. Human IFN- α 2b belongs to the IFN- α class of proteins also known as leukocyte interferons. IFN- α comprises a family of related but distinct proteins with molecular weights ranging from 16-27 kDa with antiviral, antiproliferative and immunomodulatory activities. The IFN- α family is composed from as many as 14 different genes. The immunogen used to generate the 7N4-1 hybridoma was E. coli-expressed recombinant human IFN- α 2b. This is a neutralizing antibody.

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

Intracellular staining (flow cytometry)	Routinely Tested
Neutralization	Tested During Development
Immunocytochemistry (cytospins)	Reported

Neutralization Activity:

This antibody has been reported to be useful for the neutralization of recombinant human IFN- α . Neutralization activity may be measured using MTT dye conversion in a IFN- α mediated EMC viral resistance assay using A549 as indicator cells.

50% Neutralization (ND50) at 0.3 - 3 μ g/mL

\geq 95% Neutralization at 10 - 50 μ g/mL

Suggested Companion Products

Catalog Number	Name	Size	Clone
554721	Purified NA/LE Mouse IgG1 κ Isotype Control	0.5 mg	107.3

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.

References

- Dipaola M, Smith T, Ferencz-Biro K, Liao MJ, Testa D. Interferon-alpha 2 produced by normal human leukocytes is predominantly interferon-alpha 2b. *J Interferon Res.* 1994; 14(6):325-332. (Biology)
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- Siegal FP, Kadowaki N, Shodell M, et al. The nature of the principal type 1 interferon-producing cells in human blood. *Science.* 1999; 284(5421):1835-1837. (Clone-specific: Immunocytochemistry (cytospins))
- Vogel S, Friedman R, Hogan M. Measurement of antiviral activity induced by interferons a, b, and g. In: Coligan JE, Kruisbeek AM, Margulies DH, Shevach EM, Strober W, ed. *Current Protocols in Immunology.* New York: John Wiley & Sons; 2007:6.9.1-6.9.15. (Methodology: Neutralization)

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