

Recombinant Human Interferon– α A/D (*Bgl* II)

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Catalan Novel	DIVIGADA
Catalog Number:	PHC4044
Quantity:	10^5 Units
Lot Number:	See product label.
Molecular Weight:	19.4 kDa
Description:	A hybrid recombinant human IFN $-\alpha$ constructed from human interferon- α A and human interferon- α D. This interferon is highly reactive on human, primate, mouse, rat, hamster, canine, feline, equine, ovine, caprine, porcine, bovine, and rabbit cells. This product can substitute for any type I interferon (interferon alpha, beta, omega, and tau) in these species. This product is described by Rehberg, et al., 1982.
Purity:	>95%
Biological Activity:	Assay used to measure bioactivity: Interferon was titrated with the use of the cytopathic effect inhibition assay as described by Rubinstein, et al. In this antiviral assay for interferon about 1 unit/mL of interferon is the quantity necessary to produce a 50% cytopathic effect. The units are determined with respect to the international reference standard for human interferon alpha A (Hu–IFN– α A) provided by the National Institutes of Health. The units of activity are determined with bovine MDBK cells infected with vesicular stomatitis virus (VSV).
Formulation:	Phosphate Buffered Saline (PBS) containing 0.1% BSA.
Concentration:	2.1×10^6 units/mL
Specific Activity:	1.8×10^8 units/mg
Production:	Produced in E. coli.
Dilution Recommendation:	Further dilutions should be made in medium or buffered solution containing carrier protein such as PBS with 0.1% BSA.
Storage:	Store at -70°C. Upon initial thawing, apportion into working aliquots and store at -70°C. Avoid repeated freeze/thaw cycles.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
References:	Familletti, P.C., S. Rubinstein, and S. Pestka (1981) A convenient and rapid cytopathic effect inhibition assay for interferon. Meth. Enzymol. 78:387–394. Farrar, J.D., J.D. Smith, T.L. Murphy and K.M. Murphy (2000) Recruitment of Stat4 to the human interferon-
	alpha/beta receptor requires activated Stat2. J. Biol. Chem. 275(4):2693–2697. Gao, J., B.P. De, Y.L. Han, S. Choudhary, R. Ransohoff, and A.K. Banerjee (2001) Human parainfluenza virus type 3
	inhibits gamma interferon-induced major histocompatibility complex class II expression directly and by inducing alpha/beta interferon. J. Virol. 75 (3):1124–1131.
	Pestka, S. (1986) Interferon standards and general abbreviations. Meth. Enzymol. 119:14–23.
	Rehberg, E., B. Kelder, E.G. Hoal, and S. Pestka (1982) Specific molecular activities of recombinant and hybrid leukocyte interferons. J. Biol. Chem. 257:11497–11502.
	Rubinstein, S., P.C. Familletti, and S. Pestka (1981) Convenient assay for interferons. J. Virol. 37:755–758.
	Seo, S.H., E. Hoffmann, and R.G. Webster (2002) Lethal H5N1 influenza viruses escape host anti-viral cytokine responses. Nature Medicine 8(9):950–954.

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
	Use by
***	Manufacturer
[-]	Without, does not contain
from Light	Protect from light
<u> </u>	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
LOT	Batch code
IVD	In vitro diagnostic medical device
X	Temperature limitation
EC REP	European Community authorized representative
[+]	With, contains
<u> </u>	Consult accompanying documents

Limited Use Label License: Research Use Only

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 $\label{lem:continuous} \textbf{For Research Use Only. Caution: Not for human or animal the rapeutic or diagnostic use.}$

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