

Saint Louis, Missouri 63103 USA Telephone (800) 325-5832 (314) 771-5765 Fax (314) 286-7828 email: techserv@sial.com sigma-aldrich.com

ProductInformation

Interferon aA Mouse. Recombinant

Product Number | 18782

Product Description

Recombinant Mouse Interferon αA (IFN- αA) is obtained from mouse DNA expressed in *E. coli*. Its molecular weight is approximately 20 kDa.

Type I Interferons are a closely related family of proteins that induce a variety of effects on target cells including antiviral, antiproliferative and immunomodulatory activities. They are divided into subtypes according to their cell type specific activities: α subtypes (leukocytes), β subtypes (fibroblasts), ω subtypes (lymphocytes), and τ subtypes (ruminant embryos). 1

Reagent

Mouse Interferon αA is supplied as a solution of approximately 1 x 10⁶ units/ml in phosphate buffered saline containing 0.1% bovine serum albumin.

Minimum 1 x 10⁵ units/vial

Preparation Instructions

The contents of the vial may be further diluted in a buffer solution (phosphate buffered saline) containing a protein such as 0.1% bovine serum albumin. When diluting this interferon, use polypropylene pipet tips and tubes.

Storage/Stability

Store at -70 °C or below for retention of full activity. After thawing, freeze in working aliquots at -70 °C. Repeated freezing and thawing is **not** recommended and may cause significant loss of activity.

Product Profile

Interferon αA activity is measured in a bioassay system against the NIH International Standard Reference for mouse interferon α by the inhibition of cytopathic effect in mouse L929 cells with encephalomyocarditis virus (EMCV). ²⁻⁴ In this antiviral assay for interferon, approximately 1 unit/ml of interferon is the quantity necessary to produce a cytopathic effect of 50%.

Note: Specific activity is lot specific.

Purity: >95 %

References

- 1. The Cytokine Facts Books, eds., R. Callard and A. Gearing, p. 148 (Academic Press, 1994).
- Rubinstein, S., et al., J. Virol., 37, 755-758 (1981).
- 3. Familletti, P., et al., Meth. Enzymol., **78**, 387-394 (1981).
- 4. Pestka, S., Meth. Enzymol., **119**, 14-23 (1986).

kaa 01/03