

Human Universal Type I Interferon

Catalog No.	CR2019	Quantity:	1 X 10E6 U
Description:	Universal Type I IFN is an alpha interferon hybrid (Human Interferon Alpha A/D [Bg/II]) constructed from recombinant human IFN alpha A and Human IFN alpha D. Activity has been observed on many mammalian cells, including human, monkey, mouse, bovine, rat, cat, pig, rabbit, guinea pig, or hamster. This product is useful for cross-species testing with Interferon or for species where autologous interferon is not available.		
Source:	<i>E. coli</i>		
Formulation:	Liquid in PBS containing 0.1% BSA		
Purity:	≥ 95%		
Purification:	Ion Exchange Chromatography		
Biological Activity:	1.33 x 10 ⁷ units/ml (MDBK/VSV)		
Specific Activity:	1.66 x 10 ⁸ units/mg (MDBK/VSV)		
Storage & Stability:	Store at -70°C. Thaw by incubation in cold tap water until just thawed. The contents of the tube should be apportioned in separate tubes so that freezing and thawing is kept to a minimum. Refreezing should be done on dry ice or in a dry ice/alcohol bath. Further dilution of this product should be in buffers containing protein such as 0.1% BSA. Avoid repeated freeze-thaw cycles.		
Notes:	Assays used to measure Bioactivity: Interferon was titrated in the CPE assays as listed.		

Bovine (MDBK/VSV) - The EC₅₀ for interferon in this assay is ~5 U/ml.

Human (A549/EMCV) - The EC₅₀ for interferon in this assay is ~1 U/ml. **Activity:** 1.78 x 10⁷ units/ml **Specific Activity:** 2.22 x 10⁸ units/mg.

Mouse (L929/EMCV) - The EC₅₀ for interferon in this assay is ~5 U/ml. **Activity:** 0.146 x 10⁷ units/ml **Specific Activity:** 1.75 x 10⁷ units/mg.

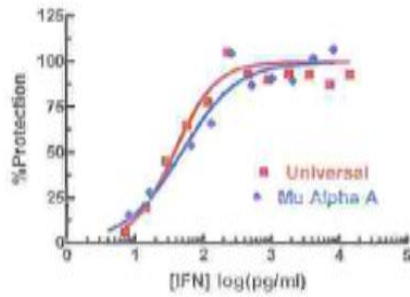
The units are determined by use of a Human IFN Alpha A laboratory standard calibrated to the international reference standard for Human Interferon Alpha-A provided by the National Institutes of Health. On L929 cells the laboratory standard has been calibrated to the reference standard for Mouse Interferon Alpha provided by the National Institutes of Health. Lot activity was derived from multiple determinations in the above assay. Please note that IFN assays vary between labs and assay systems.

The activity of Mouse IFN Alpha-A and Universal Type-I IFN was compared in an L929.EMCV CPE assay. The EC₅₀ for Universal IFN in this experiment was 38 pg/ml while the EC₅₀ for Mouse Alpha-A was 48 pg/ml.

Similar results were obtained for several batches of Mouse Alpha-A. Results are representative and may vary depending upon experimental conditions.



Comparison of Universal IFN and Mouse Alpha A Antiviral Activity on Mouse Cells



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

