



## Certificate of Analysis

### Mouse Interferon Alpha All-Subtype Neutralizing Viral Protein

**Catalog No:** 12185-1

**Lot No:** 6588R

**Size:** 10 µg/vial

**Description:** Mouse Interferon Alpha All-Subtype Neutralizing Viral Protein

**Volume:** 0.1 ml

**Concentration:** 0.1 mg/ml

**Molecular Weight:** 50kDa

**Activity (EC<sub>50</sub>):** 0.3 – 11.5 ng/ml (varies by subtype)

**Buffer:** Phosphate-buffered saline (PBS) containing 0.1% bovine serum albumin (BSA)

**Endotoxin:** < 1 EU/µg

**Purity:** > 95%

**Purification Method:** A combination of ion exchange and size exclusion chromatography

**Specificity:** Neutralizes all mouse interferon alpha subtypes

**Cross-Reactivity:**

- Neutralizes all human interferon alpha subtypes, human interferon beta, human interferon omega, rat interferon alpha 1 and mouse limitin
- Does not neutralize mouse interferon beta, human interferon gamma, human interferon lambda 1, human interferon lambda 2 or human interferon lambda 3 when tested at ≥ 100X the typical neutralizing dose

**Assay Used to Measure Bioactivity:** Activity is reported as the concentration of protein required to neutralize one unit of mouse interferon alpha 4 (Mu-IFN-α4) to a 50% endpoint. Interferon was titrated with the use of a modified cytopathic effect inhibition assay [Rubinstein, S., Familletti, P.C., and Pestka, S. (1981) "Convenient Assay for Interferons," *J. Virol.* 37, 755-758]. In this antiviral assay, approximately 1 unit/ml of interferon is the quantity necessary to reduce the cytopathic effect on L929 cells challenged with EMCV to 50%. The units are determined with respect to the international reference standard for Mu-IFN-α provided by the National Institutes of Health (Ga02-901-511).

**Tested Applications:** Neutralization, Western Blot

*Optimal dilutions should be determined by each laboratory for each application.*

**Shipping Conditions:** Dry Ice

**Physical State of Product During Shipping:** Frozen

**Storage Conditions / Comments:** After receipt, the product may be stored at -20°C for short-term use (≤ 6 months). For long-term storage, we recommend storing the product at -70°C or below for retention of full activity. Thaw product vial 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 the product should be in buffers containing protein such as 0.1% bovine serum albumin (BSA). For more information on protein handling, visit our Resource Library at [www.pbl assaysci.com](http://www.pbl assaysci.com).

### Authorization

Released by: \_\_\_\_\_ 

Date: February 8, 2024

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