

**DESCRIPTION**

**Source** Mouse myeloma cell line, NS0-derived  
Leu22-Lys199  
Accession # Q7TSL0

**N-terminal Sequence Analysis** Leu22

**Predicted Molecular Mass** 21 kDa

**SPECIFICATIONS**

**SDS-PAGE** 19-22 kDa, reducing conditions

**Activity** Measured in an anti-viral assay using L-929 mouse fibroblast cells infected with encephalomyocarditis (EMC) virus. Vogel, S.N. *et al.* (1982) Infect. Immunol. **38**:681.  
The ED<sub>50</sub> for this effect is 0.2-1.2 ng/mL.

**Endotoxin Level** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE with silver staining.

**Formulation** Lyophilized from a 0.2 µm filtered solution in Sodium Acetate, NaCl and EDTA. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

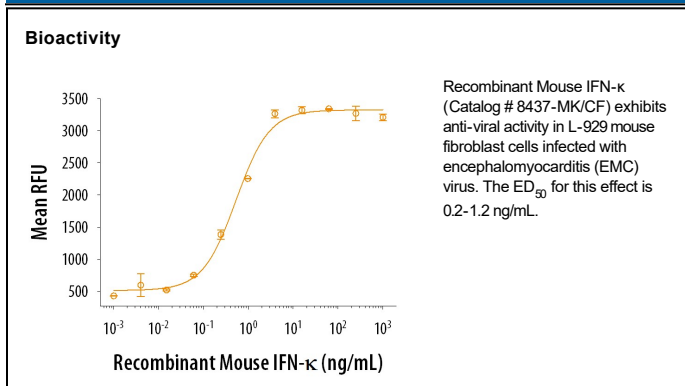
**Reconstitution** Reconstitute at 200 µg/mL in sterile water.

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**DATA**



**BACKGROUND**

Interferon (IFN)-κ is a member of the type I IFN family, which also includes IFN-α, -β, -ε, and -ω. Mouse IFN-κ is expressed at low levels in peritoneal macrophages and its expression is up-regulated by double-stranded (ds) RNA and IFN-γ (1). Mice over-expressing IFN-κ in pancreatic β cells developed type I diabetes, similar to what has been reported for mice over-expressing IFN-α, -β, and -γ (1-4). Mouse IFN-κ shares 68% and 30% amino acid sequence identity with rat and human IFN-κ, respectively. Human IFN-κ has been detected in keratinocytes, monocytes, and monocyte-derived dendritic cells and is reported to have contact-dependent antiviral activity (5-7). Human papillomavirus (HPV) 16 oncogene expression, which is necessary for the development of cervical cancer, has been shown to down-regulate human IFN-κ expression (8-11).

**References:**

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