

## Recombinant Murine Interferon-lambda 2/Interleukin-28A

(rMuIFN-λ2/IL-28A)

**PrimeGene Technical Data Sheet** 

Catalog Number:

**Source:** Escherichia coli.

**Molecular Weight:** Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.

**Quantity:**  $5\mu g/20\mu g/1000\mu g$ 

AA Sequence: DPVPRATRLP VEAKDCHIAQ FKSLSPKELQ AFKKAKDAIE KRLLEKDMRC SSHLISRAWD

LKQLQVQERP KALQAEVALT LKVWENMTDS ALATILGQPL HTLSHIHSQL QTCTQLQATA

EPKPPSRRLS RWLHRLQEAQ SKETPGCLED SVTSNLFRLL TRDLKCVASG DQCV

**Purity:** > 95 % by SDS-PAGE and HPLC analyses.

126-08

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by an anti-viral assay

using human HepG2 cells infected with encephalomyocarditis is less than 3 ng/ml, corresponding to a

specific activity of  $> 3.3 \times 10^5$  IU/mg.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4, with 5 % trehalose.

**Endotoxin:** Less than 0.1 EU/μg of rMuIFN-λ2/IL-28A as determined by LAL method.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the

bottom. Reconstitute in sterile distilled water or aqueous buffer containing  $0.1\,\%$  BSA to a concentration of 0.1- $1.0\,$  mg/mL. Stock solutions should be apportioned into working aliquots and

stored at  $\leq$  -20 °C. Further dilutions should be made in appropriate buffered solutions.

**Shipping:** The product is shipped at ambient temperature. 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.

Usage: This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further

evaluation purposes. NOT FOR HUMAN USE.

## Murine Interferon-lambda 2/Interleukin-28A

Interferon lambda-2, as known as IL-28A, belongs to the lambda interferon family. IL-28A (IFN- $\lambda$ 2), IL-28B (IFN- $\lambda$ 3) and IL-29 (IFN- $\lambda$ 1) are type III interferons that are class II cytokine receptor ligands. These IFNs signal through a receptor complex consisting of IL10R2 (also called CRF2-4) and IFNLR1 (also called CRF2-12). Interferon lambda-2 displays potent antiviral activity and antitumor activity, so it plays a significant role in the antiviral immune defense in the intestinal epithelium. It also upregulate MHC class I antigen expression. Recombinant murine interferon lambda-2 contains 174 amino acids and it shares 81 % and 66 % a.a. sequence identity with rat and human IFN- $\lambda$ 2, respectively, and functions across species.

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