

**Recombinant Human Interferon-
lambda1/Interleukin-29
(rHuIFN-λ1/IL-29)
PrimeGene Technical Data Sheet**

Catalog Number:	106-07
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 19.8 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.
Quantity:	5μg/20μg/1000μg
AA Sequence:	GPVPTSKPTT TGKGCHIGRF KSLSPQELAS FKKARDALEE SLKLNWSCS SPVFPGNWDL RLLQVRERPV ALEAELALTL KVLEAAAGPA LEDVLDQPLH TLHHILSQLQ ACIQPQPTAG PRPRGRLHHW LHRLQEAPKK ESAGCLEASV TFNLFRLLTR DLKYVADGNL CLRTSTHPES T
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by an anti-viral assay using human HepG2 cells infected with encephalomyocarditis is less than 5 ng/ml, corresponding to a specific activity of > 2.0 × 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.
Endotoxin:	Less than 1 EU/μg of rHuIFN-λ1/IL-29 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 ≤ -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. <ul style="list-style-type: none">● 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.

Human Interferon-lambda1/Interleukin-29

IL-28A, IL-28B, and IL-29, also named interferon-λ2 (IFN-λ2), IFN-λ3, and IFN-λ1, respectively, are newly identified class II cytokine receptor ligands that are distantly related to members of the IL-10 family (11-13% a.a. sequence identity) and the type I IFN family (15-19 % a.a. sequence identity). The expression of IL-28A, B, and IL-29 is induced by virus infection or double-stranded RNA. All three cytokines exert bioactivities that overlap those of type I IFNs, including antiviral activity and up-regulation of MHC class I antigen expression. The three proteins signal through the same heterodimeric receptor complex that is composed of the IL-10 receptor β (IL-10 Rβ) and a novel IL-28 receptor α (IL-28 Rα, also known as IFN-λR1). Ligand binding to the receptor complex induces Jak kinase activation and STAT1 and STAT2 tyrosine phosphorylation.