IL29
Recombinant Human Interleukin-29/IFN-lambda 1

Catalog No.	CRI010A	**Quantity:**	5 µg
	CRI010B		20 µg
	CRI010C		1.0 mg

Alternate Names: Interferon lambda-1, Interleukin-29, IL29, IFNL1, IFN-lambda-1, IL-29

Description: 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% aa sequence identity) and the type I IFN family (15-19% aa sequence identity). The expression of IL-28A, B, and IL-29 is induced by virus infection or doublestranded RNA. All three cytokines exert bioactivities that overlap those of type I IFNs, including antiviral activity and upregulation 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.
Recombinant Human IL-29/IFN-lambda 1is a single non-glycosylated polypeptide chain containing 181 amino acids.

Gene ID: 282618

Source: *E. coli*

Molecular Weight: 19.8 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4 + 130 mM NaCl.

Purity: >97% by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1EU/µg as determined by LAL method.

Biological Activity: Fully biologically active. The ED_{50} determined by an anti-viral assay using human HepG2 cells infected with encephalomyocarditis is less than 5 ng/ml

Specific Activity: $> 2.0 \times 10^5$ IU/mg.

Amino Acid Sequence: GPVPTSKPTT TGKGCHIGRF KSLSPQELAS FKKARDALEE SLKLKNWSCS SPVFPGNWDL RLLQVRERPV ALEAELALTL KVLEAAAGPA LEDVLDQPLH TLHHILSQLQ ACIQPQPTAG PRPRGRLHHW LHRLQEAPKK ESAGCLEASV TFNLFRLLTR DLKYVADGNL CLRTSTHPES T

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: This lyophilized preparation is stable at 2-8°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

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