



# Recombinant Protein Technical Manual

## Recombinant Human IFN- $\lambda$ 1/IL-29 Protein (His Tag)

RPES1908

### Product Data:

**Product SKU:** RPES1908

**Size:** 10 $\mu$ g

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q8IU54

### Protein Information:

**Molecular Mass:** 21.4 kDa

**AP Molecular Mass:** 28-35 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per  $\mu$ g as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Interferon lambda; IFN-lambda; Cytokine Zcyto21; Interleukin-29; IL-29; IFNL1; IL29; ZCYTO21

## Immunogen Information:

**Sequence:** Gly20-Thr200

## Background:

Interleukin-29 (IL-29) is a secreted protein which belongs to the IL-28/IL-29 family. IL-29 is a cytokine with immunomodulatory activity. IL-29 is highly similar in amino acid sequence to the IL-28. IL-28 and IL-29 are induced by viral infection and showed antiviral activity. IL-28 and IL-29 interacted with a heterodimeric class II cytokine receptor that consisted of IL10 receptor beta (IL10R beta) and an orphan class II receptor chain, designated IL-28R alpha. IL-29 plays an important role in host defenses against microbes and its gene is highly upregulated in cells infected with viruses. IL-29 may play a role in antiviral immunity. IL-29 up-regulates MHC class I antigen expression. It is a Ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IL28RA. The ligand/receptor complex seems to signal through the Jak-STAT pathway.