

# Recombinant Human IL-29

Cat. #: SI29-010

## Product Specifications

- Expression of Human Proteins in Human Cells
- Extremely Low Endotoxin Level
- High Purity
- Animal Free and Xeno Free
- Tag Free

## Protein Description

IL-29 belongs to the type III interferon protein family, which is distinct from the type I IFNs. IL-29 is induced by virus infection or double stranded RNA. IL-29 acts as a ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IFNLR1, and receptor engagement leads to the activation of the JAK/STAT signaling pathway resulting in the expression of IFN-stimulated genes (ISG), which mediate the antiviral state. IL-29 has antiviral, antitumour and immunomodulatory activities. IL-29 is primarily active in epithelial cells and this cell type selective action is because of the epithelial cell specific expression of its receptor IFNLR1. It also exerts an immunomodulatory effect by up regulating MHC class I antigen expression.

## References

- Sheppard P, et al. (2003) Nat. Immunol. 4, 63-68.
- Donnelly RP, et al. (2010) J. Interferon Cytokine Res. 30, 555-564.
- Kotenko SV, et al. (2003) Nat. Immunol. 4, 69-77.

**Source:** Derived from human cells

**Size:** 10 µg

**Shipping:** Ambient temperature

**Structure:** Glycosylated monomer

**Purity:** >95% by SDS-PAGE

**Endotoxin Level:** <0.5 EU/µg

**Molecular Weight:** 29-35 kDa

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS without carrier protein

## Activity Assay

Activity was measured by its anti-virus function in A549 cells (human lung adenocarcinoma epithelial cell line) infected with encephalomyocarditis (EMC) virus.

## Reconstitution

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

## Stability and Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general: 12 months from date of receipt, -20 to -80° C as supplied. 1 month, 2 to 8° C under sterile conditions after reconstitution. 3 months, -20 to -80° C under sterile conditions after reconstitution.

