

Synonym

IL29,IFNL1,IFNλ1,Interleukin-29,IFN lambda 1

Source

Human IL-29, His Tag (IL9-H4228) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Thr 200 (Accession # [NP_742152.1](#)).

Predicted N-terminus: Gly 20

Molecular Characterization

IL-29(Gly 20 - Thr 200)
NP_742152.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 21.1 kDa. The protein migrates as 27-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

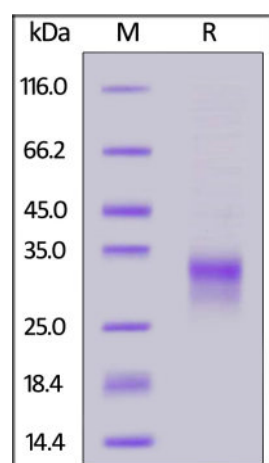
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human IL-29, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Interleukin-29, is a secreted protein which belongs to the IL-28 / IL-29 family, and is a type III interferon. It is also known as cytokine Zcyto21, Interferon lambda-1, IFN-lambda-1, IFNλ1, IL-29 and IFNL1, and is highly similar in amino acid sequence to the IL-28, the other type III interferon. IL28A, IL28B, and IL29, also named interferonλ2 (IFNλ2), IFNλ3, and IFNλ1, respectively, are classII 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). Human IL29 cDNA encodes a 200 amino acid (aa) residue precursor protein with a putative 19 aa signal peptide and a 181 aa mature protein, which is a monomer in solution. It shares 67% and 69% aa sequence identity with human IL28A and IL28B, respectively. IL-29 plays an important role in host defenses against microbes and its gene is highly upregulated in cells infected with viruses and also may

play a role in antiviral immunity. Interleukin-29 / 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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.