

Recombinant Human Interleukin-29 (rh IL-29)

Synonyms: IFN-Lambda 1, Interferon-Lambda 1 (IFNL1), Cytokine ZCYTO21.

Introduction: IL-29 is distantly related to type I Interferons and the IL-10 family. Expression of IL-29 is induced by viral infection which interacts with a heterodimeric class II cytokine receptor that consists of IL-10 Receptor beta (IL10RB) and IL-28 Receptor alpha (IL-28RA). IL-29 exhibits common features with type I IFNs such as antiviral activity, antiproliferative activity and in vivo antitumour activity. IL-29 acts similarly to IFNs, but is less effective generally and has activity in a more limited range of cell lines. IFN-ambda 1, IFN-lambda 2 and IFN-lambda 3 are closely positioned genes on human chromosome 19.

IL-29 induces ELR(-) CXC chemokine mRNA in human peripheral blood mononuclear cells, in an IFN-gamma-independent manner. IL-29 is able to generate tolerogenic DCs, an activity that could thwart IFN-beta functions. IL-29 produced in response to viral infection, activates both monocytes and macrophages producing a restricted panel of cytokines and therefore is an important factor in activating innate immune responses at the site of viral infection.

IFN-Lambda 1 antiviral and antiproliferative activity requires Interferon-Lambda 2 receptor tyrosine residues.

Description: Recombinant human IL-29 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 181 amino acids and having a molecular mass of 20 kDa.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2µm filtered solution containing no additives
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-29 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-29 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-29 should be stored at 4°C between 2-7days, for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 90% as determined by RP-HPLC and by SDS-PAGE.

Amino Acid Sequence: GPVPTSKPTTT GKGCHIGRFK SLSPQELASF KKARDALEES LKLKNWSCSS
PVFPGNWDLR LLQVRERPVA LEAELALTLK VLEAAAGPAL EDVLDQPLHLHILSQLQA CIQPQPTAGP
RPRGRLHHWL HRLQEAPKKE SAGCLEASVT FNLFRLLTRD LKYVADGNLC LRTSTHPEST

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11340290
<i>medium</i>	20 µg	Cat.N°	11340294

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