IFN-lambda 1/IL-29 Protein, Human

Cat. No.:	HY-P7026
Synonyms:	rHuIFN-λ1/IL-29; IL-29; IFN-lambda-1; Cytokine Zcyto21; Interleukin-29
Species:	Human
Source:	E. coli
Accession:	Q8IU54 (G20-T200)
Gene ID:	282618
Molecular Weight:	Approximately 19.8 kDa

PROPERTIES

AA Sequence	G P V P T S K P T T T G K G C H I G R F K S L S P Q E L A S F K K A R D A L E E S L K L K N W S C S S P V F P G N W D L R L L Q V R E R P V A L E A E L A L T L K V L E A A A G P A L E D V L D Q P L H T L H H I L S Q L Q A C I Q P Q P T A G P R P R G R L H H W L H R L Q E A P K K E S A G C L E A S V T F N L F R L L T R D L K Y V A D G N L C L R T S T H P E S T
Biological Activity	The ED_{50} is <5 ng/mL as measured by HepG2 cells, corresponding to a specific activity of >2.0 × 10^5 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	IFN-lambda 1 (IL-29) is a member of the Type-III interferon family. IFN-lambda 1 is produced mainly by maturing dendritic cells and macrophages. Maturing dendritic cells, macrophages, mast cells, and alveolar cells express high levels of IFN-lambda 1[3]. IFN-lambda 1 signals through a heterodimeric receptor complex comprising IFNλ receptor 1 (IFNLR1) and IL-10 receptor subunit-β (IL-10RB). When binding to the receptor complex, Jak1 and Tyk2 will be activated, and leads to subsequent

tyrosine phosphorylation of the IFN-λR1 (intracellular domain, Tyr406 and Tyr343, Tyr517), and activation of STAT1 and STAT2[1]. Activated STAT1 and STAT2 recruits IRF-9 to form a trimeric transcription factor complex (ISGF3), which mediates the antiviral state[4].
IFN-lambda 1 modulates immunity in infections and autoimmune diseases[2].

REFERENCES

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