IFN-lambda 3/IL-28B Protein, Human (HEK293, His)

Cat. No.:	HY-P72552
Synonyms:	Interferon lambda-3; IFN-lambda-3; IL-28B; IL-28C; ZCYTO22
Species:	Human
Source:	HEK293
Accession:	Q8IZI9 (V22-V196)
Gene ID:	282617
Molecular Weight:	Approximately 22 kDa

PROPERTIES

AA Sequence	V P V A R L R G A L P D A R G C H I A Q F K S L S P Q E L Q A F K R A K D A L E E S L L L K D C K C R S R L F P R T W D L R Q L Q V R E R P V A L E A E L A L T L K V L E A T A D T D P A L G D V L D Q P L H T L H H I L S Q L R A C I Q P Q P T A G P R T R G R L H H W L H R L Q E A P K K E S P G C L E A S V T F N L F R L L T R D L N C V A S G D L C V
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB,150 mM NaCl,1 mM EDTA, 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 3 (IL-28B) is a member of the Type-III interferon family. Human IFN-lambda 2 shares 61.98% common aa identity with mouse. IFN-lambda 2 is produced particularly by dendritic cells (DCs), when following viral or bacterial infection[3]. IFN-lambda 3 mediates effects by 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. Activated STAT1 and STAT2 together with IRF-9 (p48) form a trimeric transcription factor complex (ISGF3). The formed ISGF3 complexes then translocate to the nucleus and promotes the production of IFN-stimulated genes (ISGs) such

as IRF7, MX1, and OAS1[2].
IFN-lambda 3 has antiviral antitumour and immunomodulatory activities[1]. Genetic variants in the IFN-lambda 3 g is associated with pulmonary fibrosis in patients with systemic sclerosis[4].

REFERENCES

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