

Interleukin-28B, mouse recombinant (rmIL-28B)

Catalog No: 97641 Lot No: XXXXX Source: *E. coli*

Synonyms: Interferon lambda-3, IFN-lambda-3, Interleukin-28B, IL-28B, Ifnl3, Il28, Il28b, IFL-1, INF-alpha, INF-lambda

Background

IL-28B is a cytokine remotely related to type I interferons and the IL-10 family. Interleukin-28B, interleukin 28A (IL28A), and interleukin 29 (IL29) are 3 closely related cytokine genes which form a cytokine gene cluster on a chromosomal region mapped to 19q13. Expression of the cytokines encoded by these 3 genes can be induced by viral infection. All 3 cytokines interact with a heterodimeric class II cytokine receptor which consists of interleukin 10 receptor, beta (IL10RB) and interleukin 28 receptor, alpha (IL28RA).

Description

IL-28B Mouse Recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 174 amino acids and having a molecular mass of 19.6 kDa. IL28B is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

IL28B was lyophilized from a 0.2 μ m filtered concentrated solution in 1 x PBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized IL-28B in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other agueous solutions.

Stability

Lyophilized IL-28B although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL28B should be stored at 4°C between 2-7 days and 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 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

DPVPRATRLP VEAKDCHIAQ FKSLSPKELQ AFKKAKGAIE KRLLEKDMRC SSHLISRAWD LKQLQVQERP KALQAEVALT LKVWENINDS ALTTILGQPL HTLSHIHSQL QTCTQLQATA EPKPPSRRLS RWLHRLQEAQ SKETPGCLED SVTSNLFQLL LRDLKCVASG DQCV

Activity

The ED50 as determined by an anti-viral assay using human HepG2 cells infected with encephalomyocarditis is less than 30 ng/ml, corresponding to a specific activity of $> 3.3 \times 10^4$ IU/mg.





Usage

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