## Recombinant Mouse Interleukin-28B (rm IL-28B)

Synonyms: Interferon lambda-3, Ifnl3, IFL-1, INF-alpha

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

Source: Escherichia coli

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

Formulation: Lyophilized from a 0.2µm filtered concentrated solution in 1xPBS, pH 7.4.

**Solubility:** It is recommended to reconstitute the lyophilized rm IL-28B in sterile  $H_2O$  not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm IL-28B although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rm IL-28B 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 97.0% as determined by

(a) Analysis by RP-HPLC and (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.

**Biological Activity:** The ED<sub>50</sub> 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 >  $3.3 \times 10^4 \text{ IU/mg}$ .

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small	5 µg	Cat.N°	12349280
medium	20 µg	Cat.N°	12349284