



# Recombinant Mouse IL-28B

20180403BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>M10-039</b>
Size:	20 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	338374
<b>Synonyms:</b>	Interferon lambda-3, IFN-lambda-3, Interleukin-28B, IL-28B, Ifnl3, I128, I128b.

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). Recombinant mouse 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.

### Sequence

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

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### Database References

<b>Protein RefSeq:</b>	NP_796370.1
<b>Uniprot ID:</b>	Q8CGK6
<b>mRNA RefSeq:</b>	NM_177396.1

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 97% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	174
<b>MW:</b>	19.6 kDa

**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).

**Reconstitution:** Centrifuge the vial prior to opening Reconstitute in water to a concentration not less than 100 µg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**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 × 10<sup>4</sup> IU/mg.