



Recombinant Mouse IL-28A

20180403BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	M10-029
Size:	20 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	330496
Synonyms:	Interferon lambda-2, IFN-lambda-2, Interleukin-28A, IL-28A, Ifnl2, Il28a, EG330496

IL-28A is distantly related to type I interferons and the IL-10 family. Expression of IL-28A is induced by viral infection which interacts with a heterodimeric class II cytokine receptor that consists of interleukin 10 receptor, beta (IL10RB) and interleukin 28 receptor, alpha. IL-28A exhibits common features with type I IFNs such as antiviral activity, antiproliferative activity and in vivo antitumour activity. IL-28A acts similarly to IFNs, but is less effective generally and has activity in a more limited range of cell lines. IFN- λ 1, IFN- λ 2 and IFN- λ 3 are closely positioned genes on human chromosome 19. IL-28A induces ELR(-) CXC chemokine mRNA in human peripheral blood mononuclear cells, in an IFN- γ -independent manner. IL-28A is able to generate tolerogenic DCs, an activity that could thwart IFN- β functions. IL-28A produced in response to viral infection, activates both monocytes and macrophages producing a restricted panel of cytokines and therefore is an important factor in activating innate immune responses at the site of viral infection.

Recombinant Mouse Interleukin-28A produced in E. coli is a single, non-glycosylated polypeptide chain containing 174 amino acids and having a total molecular mass of 19.7kDa.

Sequence

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DPVPRATRLP VEAKDCHIAQ FKSLSPKELQ AFKKAKDAIE  
KRLLLEKDMRC SSSLISRAWD LKQLQVQERP KALQAEVALT  
LKVWENMTDS ALATILGQPL HTLSHIHSQL QTCTQLQATA  
EPKPPSRRLS RWLHRLQEAQ SKETPGCLED SVTSNLFRLI  
TRDLKCVASG DQCV
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Database References

Protein RefSeq:	NP_001019844.2
Uniprot ID:	P48346
mRNA RefSeq:	NM_001024673.2

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	174
MW:	19.7 kDa

Stability: Lyophilized IL-28A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-28A should be stored at 4°C between 2-7 days and for future use below -18°C.

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 ED₅₀ as determined by an anti-viral assay using human HepG2 cells infected with encephalomyocarditis(EMC) virus is less than 3 ng/ml, corresponding to a specific activity of > 3.3 × 10⁵ IU/mg.