

## **California Bioscience**

## **Product Datasheet**

Product Name	Interleukin-28A Human Recombinant
Cata No	CB501336
Source	Escherichia Coli.
Synonyms	Interleukin-28A, IL-28A, IFN-Lambda 2, Interferon-Lambda 2, Cytokine ZCYTO20, IL28A, IFNL2, ZCYTO20.

#### Description

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-ambda 1, IFN-lambda 2 and IFN-lambda 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-gamma-independent manner.

IL-28A is able to generate tolerogenic DCs, an activity that could thwart IFN-beta 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.

IL-28A human recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 175 amino acids and having a molecular mass of 19.6 kDa.

# Sterile Filtered White lyophilized (freeze-dried) powder.

#### Purity

Greater than 85% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

#### Formulation

Lyophilized from a 0.2 µm filtered solution containing no additives.

#### Reconstitution

It is recommended to reconstitute the lyophilized IL-28A in sterile  $18M\Omega$ -cm H2O not less than  $100\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized IFN-Lambda 2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFN-Lambda 2 Recombinant 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.

#### Sequence

VPVAR LHGALPDARG CHIAQFKSLS PQELQAFKRAKDALEESLLL KDCRCHSRLF PRTWDLRQLQ VRERPMALEA ELALTLKVLE ATADTDPALV DVLDQPLHTL HHILSQFRAC

#### **Physical Appearance**

### \* For Non-Clinical Research Use Only \*



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IQPQPTAGPR TRGRLHHWLY RLQEAPKKES

PGCLEASVTFNLFRLLTPPAde 209498heet