

### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Recombinant Human Interleukin-20 (IL-20)

3	Catalog No.	Source	(
3	228-10906	Escherichia Coli.	
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### **Synonyms**

IL10D, ZCYTO10, IL-20, MGC96907, Four alpha helix cytokine Zcyto10.

#### Introduction

IL20 is a cytokine structurally related to interleukin 10 (IL10). IL20 cytokine has been shown to transduce its signal through signal transducer and activator of transcription 3 (STAT3) in keratinocytes. A specific receptor for this cytokine is found to be expressed in skin and upregulated dramatically in psoriatic skin, suggesting a role for this protein in epidermal function and psoriasis.

# Description

Interleukin-20 Human Recombinant produced in E.Coli is a single, non-glycosylated homodimeric polypeptide chain containing 2 x 153 amino acids and having a total molecular mass of 35,212 Dalton. The IL-20 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized carrier free.

### Solubility

It is recommended to reconstitute the lyophilized Interleukin -20 in sterile  $18M\Omega$ -cm H2O at a concentration of 0.5mg/ml or less.

# Stability

Lyophilized Interleukin-20 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL20 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.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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### **Purity**

Greater than 95.0% as determined by (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

# Amino acid sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Lys-Thr-Leu.

# **Biological Activity**

The Biological Activity was determined by measuring the dose dependent activation of STAT3 in human epidermal keratinocytes (HEKa cells). Significant STAT3 activation is observed with 100 ng/mL of recombinant human IL-20 corresponding to a Specific Activity of 10,000IU/mg.