



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet Recombinant Mouse Interleukin-20

Catalog No.
228-10907

Source
Escherichia Coli.

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 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 152 amino acids and having a total molecular mass of 17,584 Dalton. The IL-20 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1mg/ml) solution containing no additives.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-20 in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

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 (HEK2a cells). Significant STAT3 activation is observed with >100 ng/mL of Interleukin-20 recombinant mouse.

Protein content

Protein quantitation was carried out by two independent methods

1. UV spectroscopy at 280 nm using the absorbency value of 0.552 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a standard solution of IL-20 as a Reference Standard. Protein quantitation was carried out by two independent methods

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