

**TECHNICAL DATA SHEET**

# Recombinant Mouse IL-21 (Carrier-free)

Catalog Number: 21-8211

**RPx-Pro™ Recombinant Protein**  
PRODUCT INFORMATION

**CONTENTS**

Recombinant Mouse IL-21 (Carrier-free)

**DESCRIPTION**

IL-21 is expressed in activated human CD4+ cells and expression is upregulated in Th2, Th17, and Tfh T cell subsets. IL-21 acts on T, B, NKT and NK cells which bear the IL-21R gamma chain paired with other IL-2 receptor family members. IL-21 is important in B cell proliferation and T:B interactions leading to B cell differentiation and antibody production. Interleukin-21 is also produced by Hodgkin's Lymphoma cancer cells which is somewhat surprising as IL-21 was thought to be restricted to production by CD4+ cells.

**MOLECULAR MASS**

Recombinant Mouse IL-21 is a 15.0 kDa protein composed of 130 amino acid residues.

**AMINO ACID SEQUENCE**

MHKSSPQGPDRLRLRHLIDIVEQLKIYENDLDPELLSAPQDVKGHCHEAAAFACFQKAKLKPSNPGNNKTFIIDLVAQLRRRLPARRGGKKQK  
HIAKCPSCDSYEK RTPKEFLERLKWLLQKMIHQHLS

**SOURCE**

E. Coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

N/A

**BIOACTIVITY**

ED<sub>50</sub> is calculated as 15-20 ng/ml by anti-hCD40 mAb induced proliferation in mouse splenocytes.

**RESEARCH AREAS**

Apoptosis; Cancer; Immune System; Stem Cells & Differentiation

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Kuchen S, R Robbins, GP Sims, C Sheng, TM Phillips, PE Lipsky and R Ettinger 2007 J Immunol 179: 5886–5896. Novak J, DC Foster, RD Holly and CH Clegg 2002 J Leukoc Biol 72: 856–863. Chtanova T, SG Tangye, R Newton, N Frank, MR Hodge, MS Rolph and CR Mackay 2004 J Immunol 173: 68–78. Wurster AL, VL Rodgers, AR Satoskar, MJ Whitters, DA Young, M Collins and MJ Grusby 2002 J Exp Med 196: 969–977. H Asao, C Okuyama, S Kumaki, N Ishii, S Tsuchiya, D Foster and K Sugamura 2001 J Immunol 167: 1–5.

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