

# 32-20390: Animal-Free Recombinant Murine IL-21(Discontinued)

Alternative Name : Interleukin-21, Za11

## Description

#### Source:E.coli

IL-21 is a pleiotropic cytokine produced by CD4+ T cells in response to antigenic stimulation. Its action generally enhances antigen-specific responses of immune cells. The biological effects of IL-21 include: inducing the differentiation of T cell-stimulated B cells into plasma cells and memory B cells; the stimulation of IgG production in conjunction with IL-4; and the induction of apoptotic effects in naïve B cells and stimulated B cells in the absence of T-cell signaling. Additionally, IL-21 promotes the anti-tumor activity of CD8+ T cells and NK cells. IL-21 exerts its effect through binding to a specific type I cytokine receptor, IL-21R, which also contains the Gamma chain (Gammac) found in other cytokine receptors, including IL-2, IL-4, IL-7, IL-9 and IL-15. The IL-21/IL-21R interaction triggers a cascade of events, which includes activation of the tyrosine kinases JAK1 and JAK3, followed by activation of the transcription factors STAT1 and STAT3. Recombinant Murine IL-21 is a 15.0 kDa protein consisting of 130 amino acid residues.

## **Product Info**

 Amount :
 2 μg / 10 μg

 Purification :
 Purity:>= 98% by SDS-PAGE gel and HPLC analyses.

 Content :
 This recombinant protein is supplied in lyophilized form.

 Amino Acid :
 MHKSSPQGPD RLLIRLRHLI DIVEQLKIYE NDLDPELLSA PQDVKGHCEH AAFACFQKAK LKPSNPGNNK TFIIDLVAQL RRRLPARRGG KKQKHIAKCP SCDSYEKRTP KEFLERLKWL LQKMIHQHLS

## **Application Note**

Determined by its ability to stimulate the proliferation of human ANBL-6 cells. The expected  $ED_{50}$  is <=1.0 ng/ml, corresponding to a specific activity of>= 1 x 10<sup>6</sup> units/mg.