

32-20452: Recombinant Murine IL-21(Discontinued)

Reactivity : Human, Mouse
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 SCDSYEK RTP KEFLERLKW LQKMIHQHLS

Application Note

Assay #1: Measured by its ability to induce STAT3 signaling in U937 Stat3-Luc reporter cells. Assay #2: Determined by its ability to stimulate the proliferation of human ANBL-6 cells. The expected ED50 is ≤ 1.0 ng/ml, corresponding to a specific activity of ≥ 1 × 10⁶ units/mg.