DATASHEET
Version 20181206

IL-21, Mouse

Cat. No.: Z03242-10

Size: 10.0 ug

Synonyms: none

Description:

Interleukin-21 (IL-21) belongs to the Type I four helix bundle cytokines, and shares the common cytokine receptor γ chain with IL-2, IL-4, IL-7, IL-9, and IL-15. IL-21 is expressed by CD^{4+} T cells, natural killer (NK) T cells, and Th17 cells. The IL-21 receptor is highly expressed on CD^{4+} and CD^{8+} B cells. IL-21 plays a pivotal role in the survival and proliferation of B cells, and their differentiation to immunoglobulin (Ig) producing cells. IL-21regulates the production of IgG1 and IgE by B cells, and diminishes the severity of allergy and asthma. In some cases, IL-21 induces B cell apoptosis. Other roles of IL-21 include regulation of the innate immune system, implication in autoimmunity, and antitumor activity.
Recombinant mouse interleukin-21 (IL-21) produced in *E.coli* is a single non-glycosylated polypeptide chain containing 130 amino acids. A fully biologically active molecule, rhIL-21 has a molecular mass of 15.1 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MHKSSPQGPD RLLIRLRHLI DIVEQLKIYE NDLDPELLSA
00041 PQDVKGHCEH AAFACFQKAK LKPSNPGNNK TFIIDLVAQL
00081 RRRLPARRGG KKQKHIAKCP SCDSYEKRTP KEFLERLKWL
00121 LQKMIHQHLS
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Source: *E. coli*

Species: Mouse

Biological Activity: ED_{50} < 1 ng/mL, measured by its ability to stimulate the proliferation of human ANBL-6 cells, corresponding to a specific activity of > 1.0×10^6 units/mg.

Molecular Weight: 15.1 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant mouse interleukin-21 (IL-21) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, mouse interleukin-21 (IL-21) should be stable up to 1 week at 4°C or up to 2 months at -20°C.

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