

Recombinant Murine Interleukin-21 (rm IL-21)

Interleukin-21 is produced by CD4+ T cells in response to antigenic stimulation. Its action enhances antigen-specific responses of immune cells. The biological effects of IL-21 include induction of differentiation of T-cells-stimulated B-cells into plasma cells and memory B-cells, stimulation (in conjunction) with IL-4 of IgG production and induction of apoptotic effects in native 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 and is 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 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 130 amino acids and having a total molecular mass of 15kDa.

Synonyms :	none
Source:	<i>Escherichia coli</i>
AA Sequence:	MHKSSPQGPD RLLIRLRHLI DIVEQLKIYE NDLDPPELLSA PQDVKGHCEH AAFACFQKAK LKPSNPGNNK TFIIDLVAQL RRRLPARRGG KKQKHIKACP SCDSYEK RTP KEFLERLKW LQKMIHQHLS
Formulation:	Lyophilisate from a 0.22 µm filtered carrier free solution in 25 mM sodium phosphate pH 7.3 + 200mM NaCl
Reconstitution:	Reconstitute in sterile endotoxin free water not less than 100 µg/ml
Stability:	The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rm IL-21 is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.
Biological Activity:	Tested by dose dependent stimulation of IL-21 induced reporter gene activation in IL-21 receptor transfected cells the specific activity of rm IL-21 is > 0.5x10 ⁵ IU/mg
Purity:	95% (verified by SDS-PAGE / silver stain)
Endotoxicity:	The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method
Order N°:	rm IL-21+Size available sizes: 2 µg, 10 µg, 50 µg

This material is offered **for laboratory research and in vitro use only**, not for drug, diagnostic or other use. EuroBioSciences will not be held responsible for patent infringement or other violations that may occur with the use of our products.