

IL-21 active protein

Recombinant Mouse IL-21 Protein

CATALOG # AAA48409	HOST E Coli	APPLICATIONS SDS-Page
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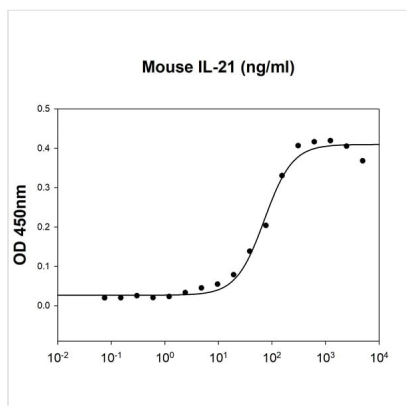
PRODUCT SYNONYMS

IL-21; Recombinant Mouse IL-21 Protein; Interleukin-21; CVID11; IL21; IL-21Za11interleukin-21; Interleukin-21 isoform; Za11; IL-21 active protein

PRODUCT SPECIFICATIONS

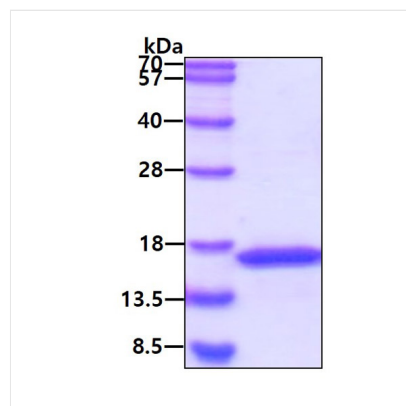
Host	E Coli
Purity/Purification	>90% by SDS-PAGE
Form/Format	Liquid. In Phosphate-Buffered Saline (pH7.4)
Concentration	1mg/ml (determined by Bradford assay) (varies by lot)
Sequence Positions	18-146aa
Sequence	MHKSSPQGPD RLLIRLRHLI DIVEQLKIYE NDLDPELLSA PQDVKGHCEH AAFACFQKAK LKPSNPGNNK TFIIDLVAQL RRRLPARRGG KKQKHIKCP SCDSYEK RTP KEFLERLKW LQKMIHQHLS
Applicable Applications for IL-21 active protein	Bioactivity, SDS-PAGE
Endotoxin	<1 EU per 1ug of protein (determined by LAL method)
Species	Mouse
Tag	Non-Tagged
Bioactivity	The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 range <= 100ng/ml.
Preparation and Storage	Can be stored at +2C to +8 degree C for 1 week. For long term storage, aliquot and store at -20C to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



Bioactivity

Mouse IL-21 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range



SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

ADDITIONAL INFORMATION

Related Product Information for IL-21 active protein	IL-21, also known as Interleukin-21, is produced from activated helper T cells such as Th17 cells and is a member of the common-gamma chain family of cytokines that includes IL-2, IL-4, IL-7, IL-9, and IL-15. Previous studies have shown that IL-21 plays an important role in the regulation of both innate and adaptive immune responses. IL-21 is critical for NK cell activation and expansion. IL-21 also promotes terminal B cell differentiation into plasma cells and antibody production. Furthermore, IL-21 enhances antigen-specific CD8 T cell expansion and the differentiation of follicular helper T cells in vivo. IL-21 also promotes the differentiation of the inflammatory Th17 lineage and contributes to autoimmunity. IL-21 isoform is an alternative splice variant form of IL-21 that we previously identified and reported to have a similar function as original IL-21. Follicular helper T cells also produce IL-21 to activate and differentiate B cells. Recombinant mouse IL-21, was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for IL-21 active protein	Hormones & Cytokines; Proteins
References	Yuqing Yuan., et al. (2017) JCI Insight. 6;2(7):e90652. Akemi Araki., et al. (2019) J Immunol. 202:3326-3333.

NCBI AND UNIPROT INFORMATION

NCBI GI #	11140821
NCBI GeneID	60505
NCBI Accession #	NP_068554.1
NCBI GenBank Nucleotide #	NM_021782.3
UniProt Accession #	Q9ES17
Molecular Weight	16,811 Da
NCBI Official Full Name	interleukin-21 isoform 2
NCBI Official Synonym Full Names	interleukin 21
NCBI Official Symbol	IL21
NCBI Official Synonym Symbols	IL-21
NCBI Protein Information	interleukin-21
UniProt Protein Name	Interleukin-21
UniProt Gene Name	IL21
UniProt Synonym Gene Names	IL-21
UniProt Entry Name	IL21_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.