

## Interleukin-21 Recombinant Protein | IL21 recombinant protein

Mouse Interleukin-21 Recombinant

|           |                                                                                                                                   |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------|
| CATALOG # | HOST                                                                                                                              |
| AAA76401  | E coli (Note: Host protein expression may be lot-specific and can be subject to change during production, including bulk orders.) |

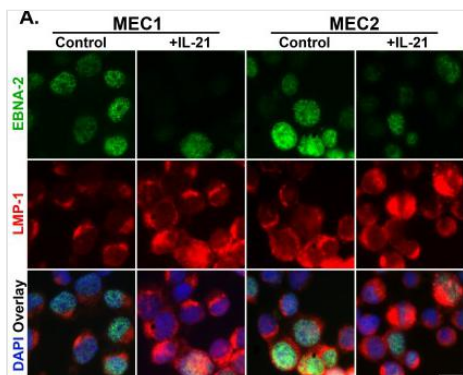
### PRODUCT SYNONYMS

Interleukin-21; Mouse Interleukin-21 Recombinant; IL21 recombinant protein

### PRODUCT SPECIFICATIONS

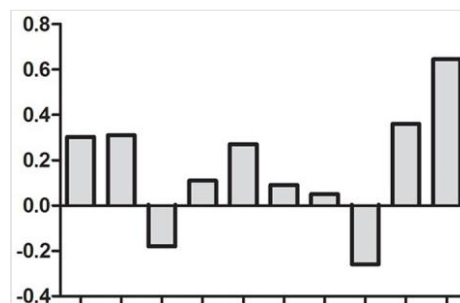
|                         |                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | E coli (Note: Host protein expression may be lot-specific and can be subject to change during production, including bulk orders.)                                                                                                                                                                                                        |
| Purity/Purification     | >97%, as determined by SDS-PAGE and HPLC                                                                                                                                                                                                                                                                                                 |
| Form/Format             | Recombinant Interleukin-21 was lyophilized from a 0.2 um filtered PBS solution pH7.5.                                                                                                                                                                                                                                                    |
| Sequence                | MERTLVCLVV IFLGTVAHKS SPQGPDRLLI LRLHLIDIVE QLKIYENDLD PELLAPQDV KGHCEHAFA<br>CFQKAKLKPS NPGNNKTFII DLVAQLRRRL PARRGGKKQK HIAKCPSCDS YEK RTPKEFL ERLKWLLQKM<br>IHQHLS                                                                                                                                                                    |
| Source                  | Optimized DNA sequence encoding Human Interleukin-21 mature chain was expressed in Escherichia Coli.                                                                                                                                                                                                                                     |
| Endotoxin               | Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/ug (1EU/ug).                                                                                                                                                                                                                 |
| Molecular Function      | Cytokine                                                                                                                                                                                                                                                                                                                                 |
| Reconstitution          | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.                                                                                                                                                                 |
| Preparation and Storage | The lyophilized protein is stable for at least years from date of receipt at -20 degree C. Upon reconstitution, this cytokine can be stored in working aliquots at 2 degree -8 degree C for one month, or at -20 degree C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles. |

### IMAGES



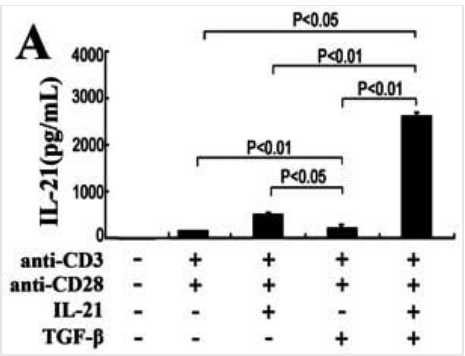
#### Application Data

The effect of IL-21 and CD40L exposure on MEC1 and MEC2 cells. Expression of EBNA-2 and LMP-1 in IL-21 treated cells .

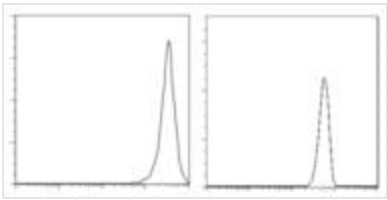


#### Application Data

The CD4+ T cell computational model predicts modulation of differentiation and maintenance by IL-21 in silico. Sensitivity analysis of IL-21 over Th1- and Th17-related molecules showing positive or negative correlation to IL-21.

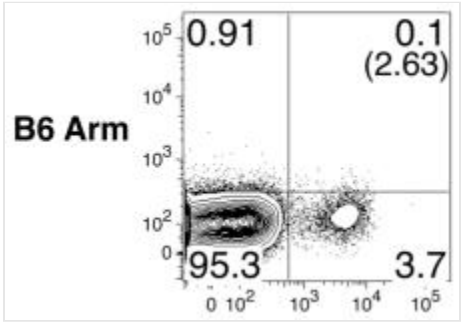


Application Data



Application Data

TGF- $\beta$  enhances the effect of IL-21 on the development of IL-21-producing CD4<sup>+</sup> T cells. Naïve CD4<sup>+</sup> T cells from CBMCs were stimulated for 3 days with immobilized anti-CD3 and anti-CD28 mAbs (neutral condition) in the presence or absence of IL-21, TGF- $\beta$  or IL-21 plus TGF- $\beta$ .



Application Data

Exhausted CD8 T cells do not upregulate CD25 expression following IL-12, IL-18, and/or IL-21 exposure. Representative flow cytometry plots show the expression of CD25 by gated CD8 T cells following acute (B6 Arm), protracted (B6 cl13), and chronic (CD4<sup>-/-</sup> cl13) LCMV infections in response to a 5.5 hr incubation with or without IL-12, IL-18, and IL-21 in the absence of BFA.

ADDITIONAL INFORMATION

|                                                        |                                                        |
|--------------------------------------------------------|--------------------------------------------------------|
| Product Categories/Family for IL21 recombinant protein | Cytokines; Mouse reagents; Recombinant Mouse Cytokines |
|--------------------------------------------------------|--------------------------------------------------------|

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.

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Online datasheet: <https://www.aaabiotech.com/il21-recombinant-protein-e-coli/76401>