

Recombinant mouse IL-21R protein

Catalog Number: ATGP4056

PRODUCT INFORMATION

Expression system

HEK293

Domain

20-237aa

UniProt No.

Q9JHX3

NCBI Accession No.

NP_068687.1

Alternative Names

Interleukin-21 receptor, IL-21 receptor, IL-21R, IL21r, Lymphocyte receptor beta, LR-beta, Novel interleukin receptor, Novel cytokine receptor 8, NR8, Novel interleukin receptor, CD360, CD360 antigen, NILR, Nilr, Uscroproteinmagleukin-21 receptor, 2

PRODUCT SPECIFICATION

Molecular Weight

52kDa (457aa)

Concentration

1mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by its ability to inhibit IFN-g secretion using NK-92 human natural killer cells. The ED50 range \leq 4 ug/ml with mouse IL-2(CAT# ATGP4049).

Tag

hIgG-His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

IL-21R (Interleukin 21 receptor), also known as NILR, belongs to the type I cytokine receptor family and Type 4 subfamily. This receptor is Heterodimer with the common gamma subunit and transduces the growth promoting signal of IL21. It is important for the proliferation and differentiation of T cells, B cells, and NK cells. The ligand binding of this receptor leads to the activation of multiple downstream signaling molecules, including JAK1, JAK3, STAT1, and STAT3. B cell IL-21 R engagement induces Blimp-1, and is important for memory responses. It engagement on mouse NK cells enhances their cytotoxic activity and IFN-gamma production. It is selectively expressed in lymphoid tissues and most highly expressed in thymus and spleen and IL21 impacts some cell types, including CD8+ memory T cells, NK cells, and subsets of CD4 memory T cells. It is also necessary for sufficient numbers of regulatory T cells to combat chronic inflammation. Recombinant mouse IL21R, fused to hlgG-His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

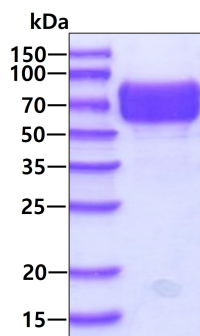
CLDLTCYTDY LWTITCVLET RSPNPSILSL TWQDEYEELQ DQETFCSLHR SGHNTTHIWIY TCHMRLSQFL SDEVFIVNVT DQSGNNSQEC GSFVLAESIK PAPPLNVTVA FSGRYDISWD SAYDEPSNYV LRGKLYELQ YRNLRDYAV RPVTKLISVD SRNVSLPEE FHKDSSYQLQ VRAAPQPGTS FRGTWSEWSD PVIFQTQAGE PEAGWDPH<LE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTTTP VLDSGDGSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG KHHHHHH>

General References

Parrish-Novak, et al. (2000) Nature 408:57-63
 Mol Cell Biol. (2005) Nov; 25(22): 9741-9752.
 De Toter D, et al. (2006) Blood. 107(9): 3708-3715.
 Kasaian, M.T. et al. (2002) Immunity 16:559-569.

DATA

SDS-PAGE



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

Biological Activity

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Mouse IL-21R inhibits the IFN-g secretion of the NK-92 human natural killer cells in the presence of mouse IL-21 (CAT# ATGP4049). The ED50 range ≤ 4 ug/ml.

