

Interleukin 7 (IL7) Active Protein | IL7 active protein

Active Interleukin 7 (IL7)

CATALOG # AAA148140	REACTIVITY Human	APPLICATIONS Activity Assay, Cell Culture
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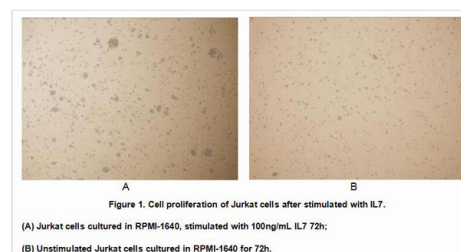
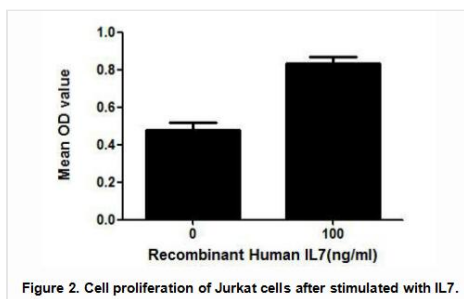
PRODUCT SYNONYMS

Interleukin 7 (IL7); Active Interleukin 7 (IL7); Pre-B-cell Growth Factor; Lymphopoietin-1; IL7 active protein

PRODUCT SPECIFICATIONS

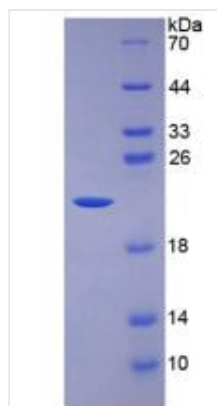
Reactivity	Human
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	177
Applicable Applications for IL7 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Asp26~His177
Isoelectric Point	8.9

IMAGES

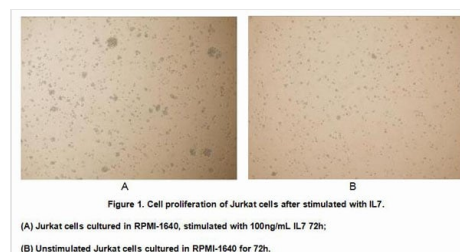


Application Data

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SDS-PAGE



Activity

IL7 (Interleukin 7) is a hematopoietic growth factor secreted by stromal cells in the bone marrow and thymus. The interaction between IL17 and the IL7 receptor triggers a cascade of signals important for T-cell development within the thymus and survival within the periphery. It is reported that IL-7 acts on both resting and activated T cells, including Jurkat cells. Thus, a proliferation assay of recombinant human IL7 was conducted using Jurkat cells. Briefly, Jurkat cells were seeded into triplicate wells of 96-well plates at a density of 10,000 cells/well in RPMI-1640 with the addition of various concentrations of IL7. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 degree C. Cell proliferation of Jurkat cells after incubation with IL7 for 72h observed by inverted microscope was shown in Figure 1. The CCK-8 data was shown in Figure 2. It was obvious that IL7 significantly promoted cell proliferation of Jurkat cells.

ADDITIONAL INFORMATION

Product Categories/Family for IL7 active protein	Cytokine; Infection immunity; Bone metabolism; Dermatology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504677
NCBI GeneID	3574
NCBI Accession #	NP_000871.1
NCBI GenBank Nucleotide #	NM_000880.3
UniProt Accession #	P13232; Q5FBY5; Q5FBY9; A0N0L3
Molecular Weight	Predicted Molecular Weight: 21.1kDa Accurate Molecular Weight: 21kDa
NCBI Official Full Name	interleukin-7 isoform 1
NCBI Official Synonym Full Names	interleukin 7
NCBI Official Symbol	IL7
NCBI Official Synonym Symbols	IL-7
NCBI Protein Information	interleukin-7
UniProt Protein Name	Interleukin-7
UniProt Gene Name	IL7
UniProt Synonym Gene Names	IL-7

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.