

Interleukin 1 Alpha Active Protein | IL1a active protein

Active Interleukin 1 Alpha (IL1a)

CATALOG #
AAA150058

APPLICATIONS
Activity Assay, Cell Culture

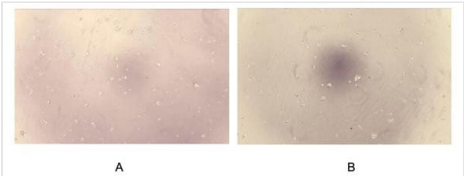
PRODUCT SYNONYMS

Interleukin 1 Alpha; Active Interleukin 1 Alpha (IL1a); IL1-A; IL-1alpha; IL1F1; Preinterleukin 1 Alpha; Hematopoietin-1; Pro-Interleukin-1-Alpha; Interleukin-1 Family Member 1; IL1a active protein

PRODUCT SPECIFICATIONS

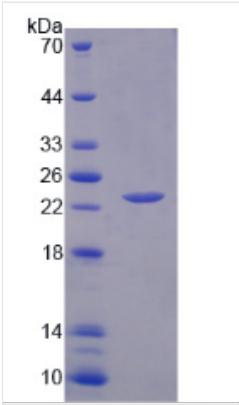
Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Glu98~Ala271
Sequence Length	271
Applicable Applications for IL1a active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Isoelectric Point	4.9
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES



Application Data

Figure. Cell proliferation of Jurkat cells after stimulated with IL1a. Interleukin 1 alpha (IL1) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL1 is produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. It binds to the interleukin-1 receptor. It is on the pathway that activates tumor necrosis factor-alpha. To test the effect of IL1a on cell proliferation, Jurkat cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well with 2% serum standard 1640 including various concentrations of recombinant human IL1a. After incubated for 96h, 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. Proliferation of Jurkat cells after incubation with IL1a for 96h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant IL1a for 96h. The result was shown in Figure 2. It was obvious that IL1a significantly increased cell viability of Jurkat cells. (A) Jurkat cells cultured in 1640, stimulated with 10ng/mL IL1a for 96h; (B) Unstimulated Jurkat cells cultured in 1640 for 96h.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for IL1a active protein	Cytokine; Apoptosis
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NCBI AND UNIPROT INFORMATION

NCBI GI #	27894330
NCBI GeneID	3552
NCBI Accession #	NP_000566.3
NCBI GenBank Nucleotide #	NP_000566.3
UniProt Accession #	Q53QF9; P01583
Molecular Weight	Predicted Molecular Mass: 23.4kDa Accurate Molecular Mass: 24kDa
NCBI Official Full Name	interleukin-1 alpha
NCBI Official Synonym Full Names	interleukin 1 alpha
NCBI Official Symbol	IL1A
NCBI Official Synonym Symbols	IL1; IL-1A; IL1F1; IL1-ALPHA; IL-1 alpha
NCBI Protein Information	interleukin-1 alpha
UniProt Protein Name	Interleukin-1 alpha
UniProt Gene Name	IL1A
UniProt Synonym Gene Names	IL1F1; IL-1 alpha

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.