

Interleukin 1 Alpha (IL1a) Active Protein | IL1a active protein

Active Interleukin 1 Alpha (IL1a)

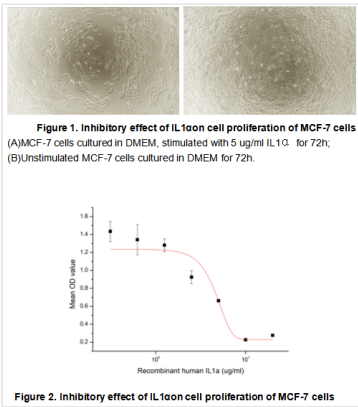
CATALOG # AAA161677	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

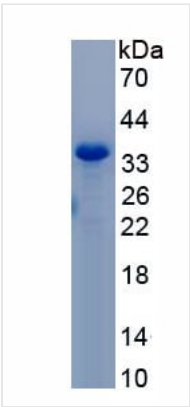
Interleukin 1 Alpha (IL1a); Active Interleukin 1 Alpha (IL1a); Interleukin 1 Alpha; IL1-A; IL-1alpha; IL1F1; Preinterleukin 1 Alpha; Hematopoietin-1; Pro-Interleukin-1-Alpha; Interleukin-1 Family Member 14; IL1a active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Ala27 1
Applicable Applications for IL1a active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	4.8
Research Area	Cytokine, Apoptosis
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



SDS-PAGE
Figure. SDS-PAGE



Bioactivity
IL1α (Interleukin-1 α) is a member of the interleukin 1 cytokine family. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces cell apoptosis. It is reported that exposure of MCF-7 cells to certain concentration of IL1α results in inhibition of cell growth. Thus, an cell proliferation assay of MCF-7 was conducted with the addition of IL1α. MCF-7 cells were seeded overnight at a density of 4,000 cells/well, and then treated with or without various concentrations of IL1α for 72h, then cells were observed by inverted microscope and cell viability was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μl of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450 nm using a microplate reader after incubating the plate for 1-4 hours in at 37 degree C. Inhibition of MCF-7 cell proliferation after incubation with IL1α for 72h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with various concentrations of IL1α for 72h. The mean OD value of MCF-7 assessed by CCK-8 was shown in Figure 2. It was obvious that IL1α significantly decreased cell viability of MCF-7 cells and the EC50 was 4.69 μg/ml.

ADDITIONAL INFORMATION

Product Categories/Family for IL1α active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	27894330
NCBI GeneID	3552
NCBI Accession #	NP_000566.3
NCBI GenBank Nucleotide #	NM_000575.3
UniProt Accession #	Q53QF9; Q7RU02; P01583
Molecular Weight	30,607 Da
NCBI Official Full Name	interleukin-1 alpha proprotein
NCBI Official Synonym Full Names	interleukin 1, alpha
NCBI Official Symbol	IL1A
NCBI Official Synonym Symbols	IL1; IL-1A; IL1F1; IL1-ALPHA
NCBI Protein Information	interleukin-1 alpha; IL-1 alpha; hematopoietin-1; preinterleukin 1 alpha; pro-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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/interleukin-1-alpha-il1a/161677>