

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

Active Interleukin 1 Alpha (IL1a)

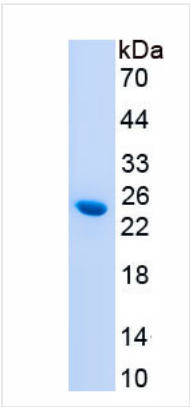
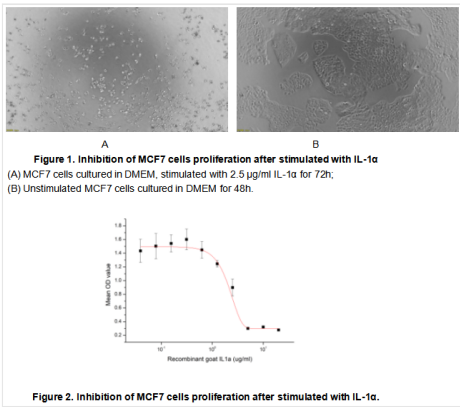
CATALOG # AAA161676	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

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	Gln90~Lys2 68
Applicable Applications for IL1a active protein	Activity Assay, Cell Culture
Species	Goat
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	4.5
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
Interleukin 1 alpha (IL-1alpha) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL-1alpha 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. To test the effect of IL-1alpha on cell apoptosis, MCF7 cells were seeded into 96-well plates at a density of 4,000 cells/well with 5% serum standard DMEM including various concentrations of recombinant goat IL-1alpha. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 ul of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-2 hours at 37 degree C. Proliferation of MCF7 cells after incubation with IL-1alpha 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 recombinant goat IL-1alpha for 72h. The result was shown in Figure 2. It was obvious that IL-1alpha significantly inhibit cell viability of MCF7 cells. The ED50 is 2.13 ug/ml.

ADDITIONAL INFORMATION

Product Categories/Family for IL1a active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6016355
NCBI GeneID	100861289
UniProt Accession #	P79161
Molecular Weight	30,856 Da
NCBI Official Full Name	Interleukin-1 alpha
NCBI Official Symbol	IL1A
NCBI Protein Information	interleukin-1 alpha; LOW QUALITY PROTEIN: interleukin-1 alpha
UniProt Protein Name	Interleukin-1 alpha
UniProt Gene Name	IL1A
UniProt Synonym Gene Names	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.