

Datasheet for ABIN6239792

IL-6 Protein (AA 30-212) (His tag)





Go to Product page

Overview

Quantity:	50 μg
Target:	IL-6 (IL6)
Protein Characteristics:	AA 30-212
Origin:	Human
Source:	HEK-293 Cells
Biological Activity:	Active
Purification tag / Conjugate:	This IL-6 protein is labelled with His tag.
Application:	Cell Culture (CC), Activity Assay (AcA)

Product Details	
Characteristics:	Tag location: N-terminal His Tag
Purity:	> 97 %
Biological Activity Comment:	Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-
	inflammatory myokine. Current data suggest that direct application of IL-6 on breast cancer
	cells inhibits proliferation in ER-positive (estrogen- receptor- positive) cells through the
	Jak/Stat3 pathway. To test the inhibitory effect of IL-6 on proliferation of ER-positive MCF-7 cell
	line, cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and
	allowed to attach overnight, then the medium was replaced with serum-free standard DMEM
	prior to the addition of various concentrations of IL-6. After incubated for 96h, cells were
	observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8
	(CCK-8). Briefly, $10\mu L$ of CCK-8 solution was added to each well of the plate, then measure the
	absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at

37oC. The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells observed by inverted microscope and detected by CCK-8 was shown in Figure 1 and Figure 2 respectively (Dosedependent effect was not detected in this case).

Target Details

Target:	IL-6 (IL6)
Abstract:	IL6 Products
Background:	Alternative Names: MGI2-A, MGI2A, HGF, BSF2, HSF, IFNB2, B-Cell Stimulatory Factor-2, Hybridoma/Plasmacytoma Growth Factor, Hepatocyte Stimulating Factor, Cytotoxic T-Cell Differentiation Factor
Molecular Weight:	22/24kDa
UniProt:	Q90YI0
Pathways:	TLR Signaling, Hormone Transport, Negative Regulation of Hormone Secretion, Myometrial Relaxation and Contraction, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Regulation of Carbohydrate Metabolic Process, Autophagy, Cell RedoxHomeostasis, Cancer Immune Checkpoints, Inflammasome

Application Details

Application Notes:	Isoelectric Point: 6.2
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

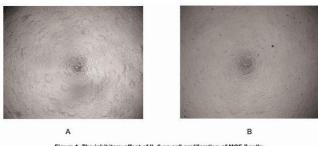
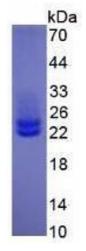


Figure 1. The inhibitory effect of IL-6 on cell proliferation of MCF-7 cell

(A) MCF-7 cells cultured in serum-free DMEM, stimulated with 100ng/mL IL-6 for 96h;

(B) Unstimulated MCF-7 cells cultured in serum-free DMEM for 96h.



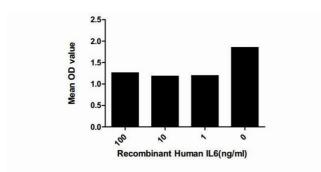


Figure 2. The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells detected by CCK8.

Image 1.

Image 2.

Image 3. Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-inflammatory myokine. Current data suggest that direct application of IL-6 on breast cancer cells inhibits proliferation in ER-positive (estrogen- receptor- positive) cells through the Jak/Stat3 pathway. To test the inhibitory effect of IL-6 on proliferation of ER-positive MCF-7 cell line, cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of IL-6. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μL of CCK-8 solution was added to each well of

the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37oC.

The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells observed by inverted microscope and detected by CCK-8 was shown in Figure 1 and Figure 2 respectively (Dose-dependent effect was not detected in this case).