

Interleukin 35 (IL35) Active Protein | IL35 active protein

Active Interleukin 35 (IL35)

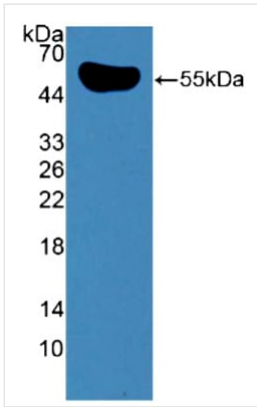
CATALOG # AAA21102	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Cell Culture, Activity Assay, Invivo Assay
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PRODUCT SYNONYMS

Interleukin 35 (IL35); Active Interleukin 35 (IL35); IL35 active protein

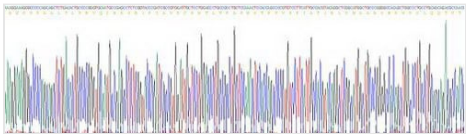
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>98%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.01% sarcosyl, 5%Trehalose.
Applicable Applications for IL35 active protein	Cell Culture, Activity Assay, Invivo Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Prokaryotic expression
Residues	The IL35 complex composed of IL27B subunit (Arg21~Lys229) and the mature form of human IL12A (Arg23~Ser219) linked by a polypeptide linker (GGGGS)3
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	8.7
Phenomenon explanation	The possible reasons that the actual band size differs from the predicted are as follows: 1. Splice variants: Alternative splicing may create different sized proteins from the same gene. 2. Relative charge: The composition of amino acids may affects the charge of the protein. 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc. 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form. 5. Polymerization of the target protein: Dimerization, multimerization etc.
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: 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.



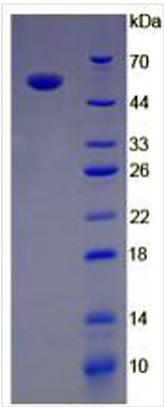
WB (Western Blot)

Sample: Recombinant IL35, Human;Antibody: Rabbit Anti-Human IL35 Ab



Identification

Gene Sequencing (extract)



SDS-PAGE

Sample: Active recombinant IL35, Human

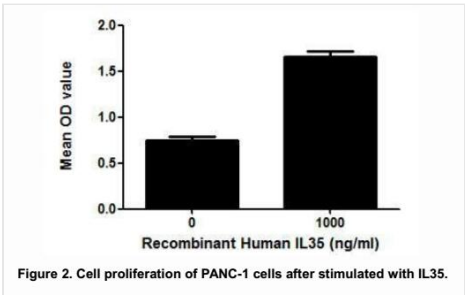
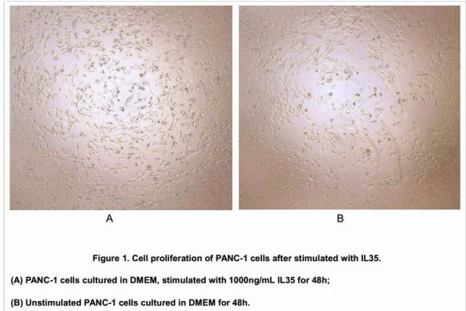


Figure 2. Cell proliferation of PANC-1 cells after stimulated with IL35.

Application Data

PPAPNSTSPV	SFIATYRLGM	AARGHSWPC	QQTPTSTSC	ITDVQLFSMA
PYVLNVTAVH	PWGSSSFVP	FITEHIKPD	PPEGVRLSPL	AERQLQVQWE
PPGSWPFPEI	FSLKYWIRYK	RQGAARFHRV	GPIEATSFIL	RAVRPRARYY
VQVAAQDLTD	YGELSDWSLP	ATATMSLGKG	GGGSRLNPA	TPDPMFPCL
HHSQNLRLAV	SNMLQKARQT	LEFYPTCTSEE	IDHEDITKDK	TSTVEACLPL
ELTKNESCLN	SRETSFITNG	SCLASRKTSF	MMALCLSSII	EDLKMVQVEF
KTMNAKLMD	PKRQIFLDQN	MLAVIDELMQ	ALNFNSETVP	QKSSLEEDPF
YKTKIKLCIL	LHAFRIRAVT	IDRVMSYLN	A	

Sequence Information



Activity

IL35 (Interleukin 35) is an IL-12 family cytokine, which is a dimeric protein composed of IL-12alpha and IL-27beta chains. IL35 is thought to mediate the immune inhibitory function of regulatory T cells and has been proven to promotes pancreas cancer growth through enhancement of proliferation and inhibition of apoptosis. Thus, proliferation assay of IL35 was conducted using PANC-1 cells. Briefly, PANC-1 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 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 recombinant human IL35. After incubated for 48h, 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. Proliferation of PANC-1 cells after incubation with IIL35 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with human recombinant IL35 for 48h. The result was shown in Figure 2. It was obvious that IL35 significantly increased cell viability of PANC-1 cells.

ADDITIONAL INFORMATION

Product Categories/Family for IL35
active protein

Cytokine; Tumor immunity; Infection immunity

NCBI AND UNIPROT INFORMATION

NCBI GI #	24430219
NCBI GeneID	3592
NCBI Accession #	NP_000873.2
NCBI GenBank Nucleotide #	NM_000882.3
UniProt Accession #	P29459; Q96QZ1
Molecular Weight	Predicted Molecular Mass: 51.7kDa Accurate Molecular Mass: 55kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	interleukin-12 subunit alpha isoform 1
NCBI Official Synonym Full Names	interleukin 12A
NCBI Official Symbol	IL12A
NCBI Official Synonym Symbols	P35; CLMF; NFSK; NKSF1; IL-12A
NCBI Protein Information	interleukin-12 subunit alpha
UniProt Protein Name	Interleukin-12 subunit alpha
UniProt Gene Name	IL12A
UniProt Synonym Gene Names	NKSF1; IL-12A; CLMF p35; NKSF1

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-homo-sapiens-human-active-protein/interleukin-35-il35/21102>