

Human IL12A + IL27B fusion protein, His tag (active)

Cat. No. GTX00070-pro

Applications Functional Assay

Species Human

Package

10 µg

Applications

Application Note

IL35 (Interleukin 35) is an IL-12 family cytokine, which is a dimeric protein composed of IL-12 α and IL-27 β 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 2000 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, 10 µl 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°C. Proliferation of PANC-1 cells after incubation with IL35 for 48h observed by inverted microscope. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with human recombinant IL35 for 48h, and IL35 significantly increased cell viability of PANC-1 cells.

Observed MW (kDa) 55 kDa.

Properties

Form Lyophilized powder

Buffer Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

Preservative ProClin 300

Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

Region/Sequence N-terminal His-Tag; The IL35 complex composed of IL27B subunit (Arg21~Lys229 of NP_005746.2) and the mature form of human IL12A (Arg23~Ser219 of NP_000873.2) linked by a polypeptide linker (GGGGS)3

Expression System E. coli

Purity > 97%

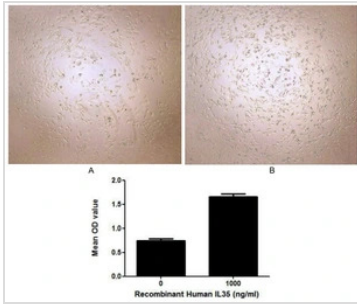
Endotoxin < 1 EU/µg

Conjugation Unconjugated

Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



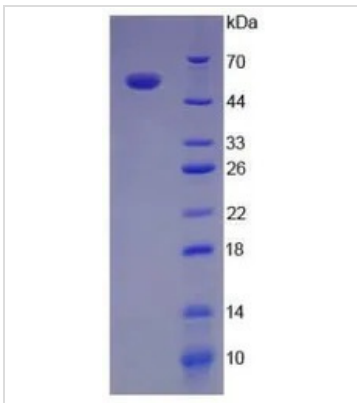
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DATA IMAGES

GTX00070-pro Functional Assay Image

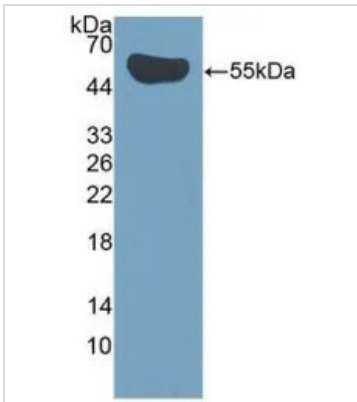
Cell proliferation effect of GTX00070-pro Human IL12A + IL27B fusion protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

(A) Unstimulated PANC-1 cells cultured in DMEM for 48hrs.

(B) PANC-1 cells cultured in DMEM, stimulated with 1000 ng/ml IL35 for 48hrs.


GTX00070-pro Image

SDS-PAGE analysis of GTX00070-pro Human IL12A + IL27B fusion protein (active).


GTX00070-pro Image

WB analysis of GTX00070-pro Human IL12A + IL27B fusion protein (active).



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