

Active Recombinant Bovine IL4 protein, His-tagged

Cat. No. IL4-4321B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Bovine IL4 protein(P30367)(26~135 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Bovine
Source	HEK293
ProteinLength	26-135 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	The interleukin 4 (IL4,) is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. Upon activation by IL4, Th2 cells subsequently produce additional IL4 in a positive feedback loop. IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of B cells into plasma cells. It is a key regulator in humoral and adaptive immunity. IL4 induces B-cell class switching to IgE, and up-regulates MHC class II production. IL4 decreases the production of Th1 cells, macrophages, IFN-gamma, and dendritic cell IL12. The activity of IL4 is usually measured by a cell proliferation assay using TF-1 cells. TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 8,000 cells/well with 2% serum standard 1640 which contains various concentrations of recombinant bovine IL4. After incubated for 4 days, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-

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8). Briefly, 10 μ l 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 2-4 hours at 37°C. Proliferation of TF-1 cells after incubation with IL4 for 4 days observed by inverted microscope was shown. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant bovine IL4 for 4 days. It was obvious that IL4 significantly increased cell viability of TF-1 cells. The ED50 is 0.92 ng/ml.

Molecular Mass 16.7kDa

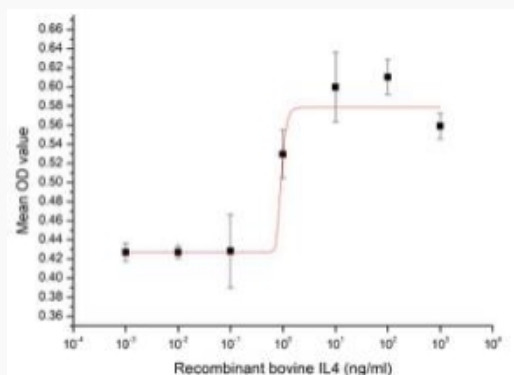
Endotoxin <1.0EU per 1 μ g (determined by the LAL method).

Purity > 90% as determined by SDS-PAGE.

Storage Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

Reconstitution Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

Activity

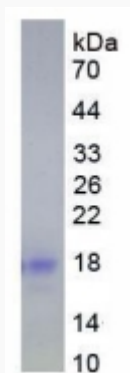


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SDS-PAGE



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