Active Recombinant Porcine IL4

Cat. No. IL4-9291P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Porcine IL4 was expressed in CHO Cells.
Species	Pig
Source	CHO
Description	Interleukin-4 (IL-4) is a pleiotropic cytokine regulates diverse T and B cell responses including cell proliferation, survival, and gene expression. It has important effects on the growth and differentiation of different immunologically competent cells. Interleukin-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of native CD4+ T cells (Th0 cells) into helper Th2 cells, and regulates the immunoglobulin class switching to the IgG1 and IgE isotypes. IL-4 has numerous important biological functions including stimulating B-cells activation, T-cell proliferation and CD4+ T-cells differentiation to Th2 cells. It is a key regulator in hormone control and adaptive immunity. IL-4 also plays a major role in inflammation response and wound repair via activation of macrophage into M2 cells. IL-4 is stabilized by three disulphide bonds forming a compact globular protein structure. Four alpha-helix bundle with left-handed twist is dominated half of the protein structure with 2 overhand connections and fall into a 2-stranded anti-parallel beta sheet.
Form	Lyophilized after extensive dialysis against PBS.
Bio-activity	ED50< 0.25="" ng/ml,="" measured="" in="" a="" cell="" proliferation="" assay=""

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	using="" tf-1="" human="" erythroleukemic="" cells,="" corresponding="" to="" a="" specific="" activity="" of="">4 x 106 units/mg
Molecular Mass	15kDa, observed by reducing SDS-PAGE
AA Sequence	His25-Cys133, expressed with an N-terminal Met.
Endotoxin	<0.2 eu/μg,="" determined="" by="" lal="">
Purity	>95% as analyzed by SDS-PAGE and HPLC.
Storage	Lyophilized recombinant protein remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rpIL-4 should be stable up to 1 week at 4°C or up to 2 months at -20°C.
Reconstitution	Reconstituted in ddH2O or PBS at 100 μg/ml.

GENE INFORMATION

Gene Name	IL4 interleukin 4 [Sus scrofa (pig)]
Official Symbol	IL4
Synonyms	IL4; interleukin 4; interleukin-4; IGG1 induction factor; B-cell growth factor 1; B-cell stimulatory factor 1; lymphocyte stimulatory factor 1; B-cell IgG differentiation factor; Il-4; BSF-1;
Gene ID	397225
mRNA Refseq	NM_214123

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Protein Refseq	NP_999288
UniProt ID	Q04745
Chromosome Location	2; 2
Pathway	Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Asthma, organism-specific biosystem; Asthma, conserved biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved bi

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