

Product Datasheet

Recombinant IL-4, Porcine (orb1494703)

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 [1]. 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 [2]. IL-4 also plays a major role in inflammation response and wound repair via activation of macrophage into M2 cells [3]. IL-4 is stabilized by three disulphide bonds forming a compact globular protein structure [4]. 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 [5].
Endotoxins	< 0.2 EU/μg, determined by LAL method.
Preservatives	Lyophilized after extensive dialysis against PBS.
Form/Appearance	Lyophilized after extensive dialysis against PBS.
Storage	Lyophilized recombinant porcine Interleukin 4 (IL-4) 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.
Note	For research use only
Application notes	Reconstituted in ddH2O or PBS at 100 μg/ml.
Protein Sequence	HKCDITLQEI I KTLNILTARKNSCMELPVTDVFAAPENTTEKETFCRASTVLRHIYRHHTCMKSLLSGLDRNLSSMANMTCVHEAKKSTLKDFLERLKTIMKEKYSKC
Purity	> 95% as analyzed by SDS-PAGE and HPLC.
Source	CHO

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MW 15kDa, observed by reducing SDS-PAGE

Expiration Date 6 months from date of receipt.

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