

Recombinant Mouse IL-4, Tag Free

Information

Accession #	P07750
Alternate Names	B cell growth factor 1; BCDF; BCGF1; BCGF-1; binetrakin; BSF1; BSF-1; IL4; IL-4
Source	Human embryonic kidney cell, HEK293-derived Mouse IL-4 protein
Protein sequence	His23-Ser140
M.Wt	13.4 kDa
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 12 months from date of receipt, -20 to -70°C as supplied.
Concentration	0.2 mg/mL
Formulation	Dissolved in sterile PBS buffer.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	The EC50 for this effect is 0.2-1.0 ng/mL. Measured by its ability to induce IL-11 secretion by Saos-2 human osteosarcoma cells.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

Purity	> 95%, determined by SDS-PAGE.
Endotoxin	<0.010 EU per 1 ug of the protein by the LAL method.

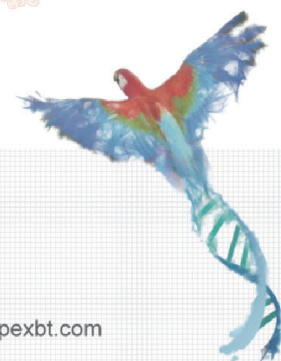
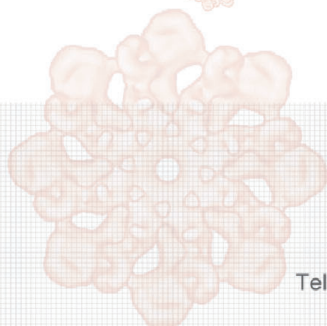
Description

白介素4 (IL-4), 又称B细胞刺激因子-1, 是一种单体的Th2细胞因子, 在免疫反应中表现出多效性[1-4]。成熟的小鼠IL-4与牛、人和大鼠IL-4的氨基酸序列同源性分别为39%、39%和59%。人、小鼠和大鼠的IL-4活性具有物种特异性^[5-7]。IL-4通过两个受体复合体发挥作用^[8,9]。表达在造血细胞上的I型受体是配体结合的IL-4R α 和常见的 γ 的异源二聚体。非造血细胞上的II型受体由IL-4R α 和IL-13R α 1组成。II型受体还传递IL-13介导的信号。IL-4主要由Th2偏向的CD4⁺T细胞、肥大细胞、嗜碱性粒细胞和嗜酸性粒细胞表达^[1,2]。它能促进小鼠B细胞的增殖、存活和免疫球蛋白类向IgG1和IgE的转化, 促进幼稚的CD4⁺T细胞获得Th2表型, 促进肥大细胞、嗜酸性粒细胞和嗜碱性粒

细胞的启动和趋化，以及上皮细胞的增殖和激活^[10-13]。IL-4在过敏性炎症和哮喘的发生发展中起主导作用^[12, 14]。

Reference

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