Datasheet

Cat. No. PM2005

# Recombinant Mouse IL-4, Tag Free

## Information

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| 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.<br>- 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

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| 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-4Rα和常见的γ的异源二聚体。非造血细胞上的II型受体由IL-4Rα和IL-13Rα1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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