



# Recombinant Rat IL-4

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

|                  |                            |
|------------------|----------------------------|
| <b>Cat.-no.:</b> | <b>R20-007S</b>            |
| Size:            | 5 µg                       |
| Lot. No.:        | According to product label |

## Scientific Background

|                        |             |
|------------------------|-------------|
| <b>Gene-ID (NCBI):</b> | 287287      |
| <b>Synonyms:</b>       | Il4; Il4e12 |

Interleukin 4 (IL-4) is a pleiotropic cytokine produced by activated T cells, mast cells, and basophils. It was initially identified as a B cell differentiation factor (BCDF), as well as a B cell stimulatory factor (BSF1). IL-4 has since been shown to have multiple biological effects on hematopoietic and non-hematopoietic cells, including B and T cells, monocytes, macrophages, mast cells, myeloid and erythroid progenitors, fibroblasts, and endothelial cells. Rat, mouse and human IL-4 are species-specific in their activities.

## Sequence

```
MHGCNDSPLR EIINTLNQVT EKGTPCTEMF VPDVLTATR  
TTENELICRA SRVLRKFYFP RDVPPCLKNK SGVLGELRKL  
CRGVSGLNSL RSCTVNESTL TTLKDFLESL KSILRGKYLQ SCTSMS
```

## Database References

|                        |           |
|------------------------|-----------|
| <b>Protein RefSeq:</b> | NP_958427 |
| <b>Uniprot ID:</b>     | P20096    |
| <b>mRNA RefSeq:</b>    | NM_201270 |

## Product Specifications

|                        |                                    |
|------------------------|------------------------------------|
| <b>Expressed in</b>    | E. coli                            |
| <b>Purity</b>          | > 98% by SDS-PAGE & HPLC analyses  |
| <b>Endotoxin level</b> | < 0.1 ng /µg of protein (<1EU/µg). |
| <b>Formulation</b>     | lyophilized                        |
| <b>Length (aa):</b>    | 126                                |
| <b>MW:</b>             | 14 kDa                             |

**Biological Activity:** Tested by its ability to suppress LPS-induced TNF- $\alpha$  and MIP-2 production in mouse splenocytes.



**AVOID REPEATED FREEZE AND THAW CYCLES!**