

Active Recombinant Rat IL3 protein, His-tagged

Cat. No. IL3-1037R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat IL3 protein(P04823)(27~166 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Rat
Source	HEK293
ProteinLength	27-166 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Interleukin 3 is an interleukin, a type of biological signal that can improve the body's natural response to disease as part of the immune system. It acts by binding to the interleukin 3 receptor. IL-3 synergizes with other cytokines to stimulate the growth of immature progenitor cells of all lineages, and is therefore a multi-lineage colony-stimulating factor (CSF). It prevents cell death and promotes the survival of macrophages, mast cells, and megakaryocytes. IL-3 can also support the growth and survival of myeloid progenitor cells through the activation of Janus Kinase 2 (JAK2) tyrosine kinase, and macrophage differentiation has been shown to be regulated by protein kinase C (PKC). Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat IL-3 and recombinant rat JAK2. Briefly, IL-3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to JAK2-coated microtiter wells and incubated for 1h at 37°C.

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Wells were washed with PBST and incubated for 1h with anti-IL-3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450 nm immediately. The binding activity of IL-3 and JAK2 was shown, and this effect was in a dose dependent manner.

Molecular Mass	17.4kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	IL3 interleukin 3 [<i>Rattus norvegicus</i>]
Official Symbol	IL3
Synonyms	IL3; interleukin 3; interleukin-3; IL-3; MCGF; mast cell growth factor; P-cell-stimulating factor; hematopoietic growth factor; multipotential colony-stimulating factor;
Gene ID	24495
mRNA Refseq	NM_031513

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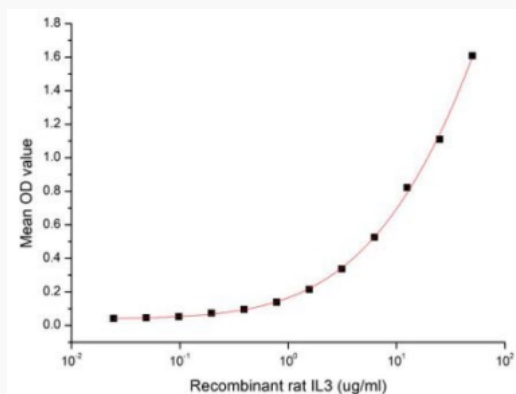
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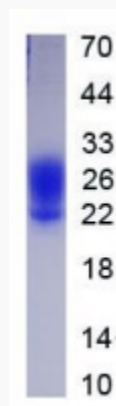
Protein Refseq

NP_113701

Activity



SDS-PAGE



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