

## Recombinant Mouse IL-3 (C-6His)

Catalog No.: RP0055

### Basic Information

#### Information

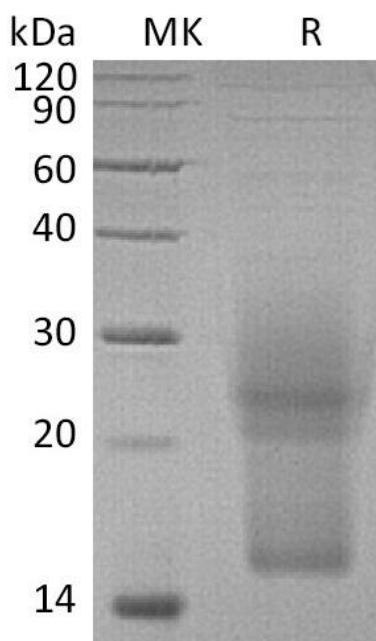
<b>Source</b>	<i>Human Cells</i>
<b>Description</b>	Recombinant Mouse Interleukin-3 is produced by our Mammalian expression system and the target gene encoding Ala27-Cys166 is expressed with a 6His tag at the C-terminus.
<b>Accession</b>	P01586
<b>Known As</b>	Interleukin-3; IL-3; Hematopoietic growth factor; Multipotential colony-stimulating factor; P-cell-stimulating factor; Il3; Il-3; Mast cell growth factor; MCGF
<b>Predicted Mol Mass</b>	16.5 KDa
<b>Apparent Mol Mass</b>	15-32 KDa, reducing conditions

#### Properties

<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Storage</b>	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
<b>Endotoxin</b>	< 0.01 EU/µg as determined by LAL test.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

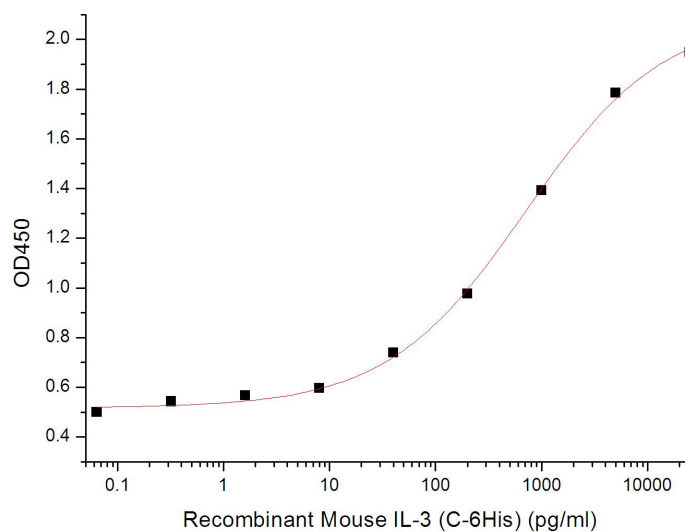
## Experimental Data

### Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

### Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED50 for this effect is 582 pg/ml. (Regularly tested)

## Background

Interleukin 3 is a pleiotropic factor produced primarily by activated T cells that can stimulate the proliferation and differentiation of pluripotent hematopoietic stem cells as well as various lineage committed progenitors. In addition, IL-3 also affects the functional activity of mature mast cells, basophils, eosinophils and macrophages. Because of its multiple functions and targets, it was originally studied under different names, including mast cell growth factor P-cell stimulating factor, burst promoting activity, multi-colony stimulating factor, thy-1 inducing factor and WEHI-3 growth factor. In addition to activated T cells, other cell types such as human thymic epithelial cells, activated mouse mast cells, mouse keratinocytes and neurons/astrocytes can also produce IL-3. IL-3 exerts its biological activities through binding to specific cell surface receptors. The high affinity receptor responsible for IL-3 signaling is composed of  $\alpha$  and  $\beta$  subunits. IL-3 is capable of supporting the proliferation of a broad range of hematopoietic cell types. It is involved in a variety of cell activities such as cell growth, differentiation and apoptosis. IL-3 has been shown to also possess neurotrophic activity, and it may be associated with neurologic disorders.