

## Recombinant Rhesus Macaque Interleukin-3 (Rhesus Macaque IL-3)

### Product Information

Product Name	Cat#	Size
	90133ES10	10 µg
Recombinant Rhesus Macaque Interleukin-3 (Rhesus Macaque IL-3)	90133ES60	100 µg
	90133ES76	500 µg

### Product Description

Interleukin 3 is a pleiotropic factor produced primarily by activated T cells that can stimulate the proliferation. At the amino acid sequence level, mature human and murine IL-3 share only 29% sequence identity. Consistent with this lack of homology, IL-3 activity is highly species-specific and human IL-3 does not show activity on murine cells. Cytokines are actively involved in the host-defense system to coordinate the functional activity and the generation of effector cells. Some of these molecules function as inflammatory mediators and hematopoietic growth factors at the same time such as IL-3. IL-3 (or multi-CSF) is known as a pleiotropic cytokine with a broad spectrum of target cells and functions. IL-3 regulates the proliferation and differentiation of normal hematopoietic progenitor cells in the early stages of hematopoiesis. And IL-3 inhibits apoptosis and promotes the autonomous growth of blast cells.

### Product Properties

<b>Synonyms</b>	Hematopoietic Growth Factor, MCGF, Multipotential Colony-stimulating Factor, P-cell-stimulating Factor
<b>Accession</b>	P25140
<b>GeneID</b>	706946
<b>Source</b>	E.coli-derived Rhesus Macaque IL-3, Ala20-Gln143.
<b>Molecular Weight</b>	Approximately 14.0 kDa.
<b>AA Sequence</b>	APMTQTTSLK TSWAKCSNMI DEIITHLNQP PLPSPDFNNL NEEDQTILVE KNLRRSNLEA FSKAVKSLQN ASAIESILKN LPPCLPMATA APTRPPIRIT NGDRNDFRRK LKFYLKTLEN EQAQ
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 98% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	Assay #1: The ED <sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of murine NFS-60 cells is less than 5.0 ng/mL, corresponding to a specific activity of > 2 × 10 <sup>5</sup> IU/mg. Fully biologically active when compared to standard. Assay #2: The ED <sub>50</sub> as determined by a cell proliferation assay using human TF-1 cells is less than 0.05 ng/mL, corresponding to a specific activity of > 2.0 × 10 <sup>7</sup> IU/mg.
<b>Endotoxin</b>	< 1.0 EU per 1µg of the protein by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 5 % trehalose. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

## **Shipping and Storage**

The products are shipped with ice pack and can be stored at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

## **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.