

## **Product Data Sheet**

## **Recombinant Mouse IL-3 (carrier-free)**

Catalog # / Size:	575502 / 10 μg 575504 / 25 μg 575506 / 100 μg 575508 / 500 μg	3.0 E 5 2.5-
Source:	Mouse IL-3, amino acids Ala 27 – Cys 166 (Accession# NM_010556), was expressed in <i>E. coli.</i>	10122.0-
Molecular Mass:	The 140 amino acid recombinant protein has a predicted molecular mass of 15673.7 Da. The DTT-reduced protein migrates at approximately 16 kDa and the non-reduced protein migrates with slightly greater mobility by SDS-PAGE.	1.5-
Purity:	>98%, as determined by Coomassie stained SDS-PAGE.	L.0
Endotoxin Level:	Less than 0.01ng per $\mu$ g cytokine as determined by the LAL method.	0.001 0.01 0.1 1 10 100 ng/ml
Activity:	$ED_{50}$ = 0.05 - 0.200 ng/ml, corresponding to a specific activity of 0.5-2.0 x $10^7$ units/mg, as determined by the dose dependent stimulation of a M-NFS-60 cell proliferation assay.	Bioactivity of mouse IL-3 was tested by a proliferation assay using M-NFS-60 cells.
Preparation:	10-100 $\mu g$ sizes are bottled at 200 $\mu g/ml.$ 500 $\mu g$ and larger sizes are bottled at the concentration indicated on the vial.	IN-INFS-OU CEIIS.
Formulation:	$0.22 \mu m$ filtered protein solution is in 10mM NaHPO <sub>4</sub> pH7.2, 0.15M NaCl	
Storage:	Unopened vial can be stored at 4°C for three months, at -20°C for six months, or at -70°C for one year. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10µg/mL in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. <b>Avoid repeated freeze/thaw cycles.</b>	

## **Applications:**

## Applications: Bioassay

Description: IL-3 is the most potent growth factor for basophils followed by granulocyte-macrophage colony-stimulating factor and IL-5. These cytokines also act on mature basophils through specific receptors, thereby mediating adhesion, migration, and releasability. IL-3 is highly expressed by mast cells, and rapid and large amount of autocrine IL-3 production is responsible for mast cell survival by IgE in the absence of antigen. IL-3 has also been implicated in the pathogenesis of several chronic inflammatory diseases, including asthma, atherosclerosis, and neurodegenerative disorders, such as multiple sclerosis.

- Antigen References: 1. Kohno M, et al. 2005 Blood 105:2059-2065.
  - 2. Valent P and Dahinden CA, et al. 2010 Curr Opin Hematol 17:60-66.
  - 3. Kleemann R, et al. 2008 Cardiovascular Research 79:360-376.
  - 4. Murphy JM and Young IG, et al. 2006 Vitam Horm 74:1-30.





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