## Recombinant Mouse IL-3 protein(His Tag)

## Catalog Number: PKSM041460

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description    |  |
|----------------|--|
| Species        | Mouse  |
| Source         | E.coli-derived Mouse IL-3 protein Asp 33-Cys 166, with an C-terminal His                             |
| Calculated MW  | 16.0 kDa   |
| Observed MW    | 17 kDa   |
| Accession      | P01586   |
| Bio-activity   | Measure by its ability to induce NFS-60 cells proliferation. The $ED_{50}$ for this effect is        |
|                | <85 pg/mL.<br>The specific activity of recombinant mouse IL-3 is approximately<br>$>1x\ 10^7$ IU/mg. |
| Properties     |  |
| Purity         | > 98 % as determined by reducing SDS-PAGE.   |
| Endotoxin      | < 0.1 EU per µg of the protein as determined by the LAL method.                                      |
| Storage        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80             |
|                | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of                  |
|                | reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.                                  |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.                      |
| Formulation    | Lyophilized from sterile PBS, pH 7.4.  |
|                | Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants                     |
|                | before lyophilization.   |
|                | Please refer to the specific buffer information in the printed manual.                               |
| Reconstitution | Please refer to the printed manual for detailed information.   |
| Data           |  |
| ki             | Da   |
|                |  |

> 98 % as determined by reducing SDS-PAGE.

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17-10-

Background

For Research Use Only

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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 abroad range of hematopoietic cell types. It is involved in avariety 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.