



Recombinant Protein Technical Manual

Recombinant Mouse Interleukin-3/IL-3 Protein (His Tag)

RPE1883

Product Data:

Product SKU: RPE1883

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P01586

Protein Information:

Molecular Mass: 16.5 kDa

AP Molecular Mass: 20-30 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Interleukin-3; IL-3; Hematopoietic growth factor; Multipotential colony-stimulating factor; P-cell-stimulating factor; Il3; Il-3; Mast cell growth factor; MCGF

Immunogen Information:

Sequence: Ala27-Cys166

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 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 α and β 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.