

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

Catalog No. PKSM041089

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

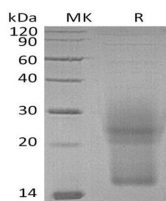
Description

Synonyms	Interleukin-3;IL-3;Hematopoietic growth factor;Multipotential colony-stimulating factor;P-cell-stimulating factor;IL3;Il-3;Mast cell growth factor;MCGF
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Ala27-Cys166
Accession	P01586
Calculated Molecular Weight	16.5 kDa
Observed molecular weight	15-32 kDa
Tag	C-His
Bioactivity	Measured in a cell proliferation assay using NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED ₅₀ for this effect is 582 pg/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 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°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, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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 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.