

Recombinant Human M-CSF (CSF1)

Cat No:HR2R1711

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	CSF1
Gene ID	1435
Accession	P09603
Alternative Name	Macrophage colony-stimulating factor 1, CSF-1, MCSF, MCSF, Lanimostim Recombinant Human Macrophage Colony Stimulating Factor (CSF1)
Species	Human
Source	E. coli
Description	M-CSF is produced by monocytes, granulocytes, endothelial cells, and fibroblasts. After cell activation, B cells and T cells and also a number of tumor cell lines are capable also of synthesizing this factor. M-CSF has been found to be synthesized by uterine epithelial cells in vivo. The M-CSF receptor is identical with the proto-oncogene fms. It has been renamed CD115. The receptor is a transmembrane protein with an extracellular ligand-binding domain of 512 amino acids, an intramembrane domain of 25 amino acids, and a cytoplasmic domain of 435 amino acids encoding a tyrosine kinase. Human M-CSF is active in mouse and rat cells. The murine factor is active in rat cells but inactive in human cells. M-CSF is a specific factor in that the proliferation inducing activity is more or less restricted to the macrophage lineage. M-CSF is a potent stimulator of functional activities of monocytes.
Functions	The ED(50) was determined by the dose-dependent stimulation of the proliferation of M-NFS-60 cells is < 1.0 ng/mL, corresponding to a specific activity of > 1.0 x 10^6 units/mg.
Formulation	Recombinant M-CSF was lyophilized from a 0.2 ?m filtered PBS solution pH 7.0 containing 1% HSA, 3% mannitol.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	18.5
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.