

Datasheet for ABIN2018212

M-CSF/CSF1 Protein (AA 33-190, Isoform 3)**2** Images**1** Publication[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	M-CSF/CSF1 (CSF1)
Protein Characteristics:	Isoform 3, AA 33-190
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50 of 1 - 3 ng/mL, measured by cell proliferation assay of M-NFS-60, corresponding to a specific activity of 3.3×10^5 - 1×10^6 units/mg. AA 33-190 (Isoform 3), expressed with an N-terminal Met.
Purity:	> 95 % as analyzed by non-reducing SDS-PAGE.
Endotoxin Level:	< 1 EU/µg, determined by LAL method.

Target Details

Target:	M-CSF/CSF1 (CSF1)
Alternative Name:	Macrophage Colony Stimulating Factor (M-CSF) (CSF1 Products)
Background:	Macrophage Colony-Stimulating Factor 1 (M-CSF), involved especially in monocytopoiesis,[1] is a hematopoietic growth factor. In mammals, it exists three isoforms, which invariably share an N-terminal 32-aa signal peptide, a 149-residue growth factor domain, a 21-residue

Target Details

transmembrane region and a 37-aa cytoplasmictail[2]. The biological activity of human M-CSF is maintained within the 149-aa growth factor domain[3], and it is only active in the disulfide-linked dimeric form[4], which is bonded at Cys63. Recombinant human Macrophage Colony-Stimulating Factor 1 (rhM-CSF) produced in E. coli is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 159 amino acids each. A fully biologically active molecule, rhM-CSF has a molecular mass of 28 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques.

Synonyms: Macrophage Colony Stimulating Factor, CSF-1, Lanimostim, MCSF, MGC31930, M-CSF.

Molecular Weight: 28 kDa, observed by non-reducing SDS-PAGE.

UniProt: [P09603](#)

Pathways: [RTK Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstituted in ddH2O or PBS or Tris-HCl, pH 8.0 at 100 µg/mL.

Buffer: Lyophilized after extensive dialysis against 50 mM Tris-HCl, pH 8.0.

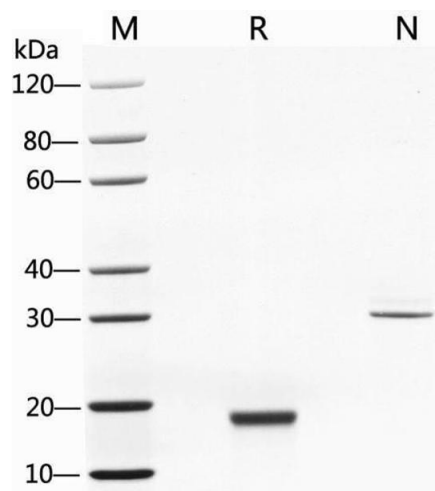
Storage: -80 °C

Storage Comment: Lyophilized recombinant human Macrophage Colony-Stimulating Factor 1 (rhM-CSF) remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rhM-CSF should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.

Expiry Date: 6 months

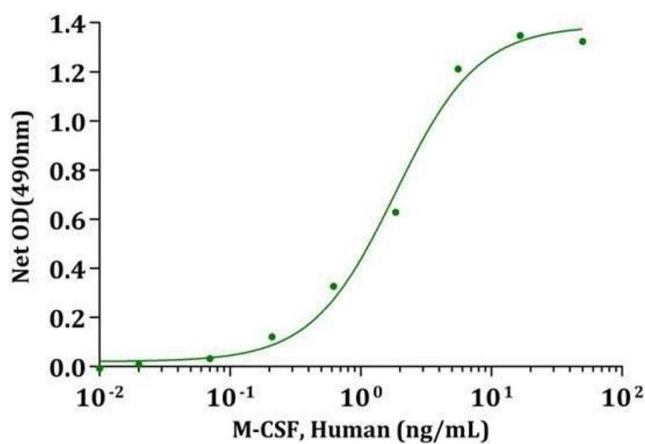
Publications

Product cited in: Bertin, Barat, Bélanger, Tremblay: "Leukotrienes inhibit early stages of HIV-1 infection in monocyte-derived microglia-like cells." in: **Journal of neuroinflammation**, Vol. 9, pp. 55, (2012) ([PubMed](#)).



SDS-PAGE

Image 1. 2 µg of M-CSF, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Activity Assay

Image 2. M-CSF, Human stimulates cell proliferation of M-NFS-60 cells. The ED50 for this effect is typically 1.99ng/mL.