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Product Datasheet

Mouse M-CSF protein, His tag, Unconjugated GTX00336-PRO

Article Name	Mouse M-CSF protein, His tag, Unconjugated
Biozol Catalog Number	GTX00336-PRO
Supplier Catalog Number	GTX00336-pro
Alternative Catalog Number	GTX00336-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	12977
UniProt	P07141
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Lys33~Ser204 (NP_001107001.1)

Application Notes

Macrophage Colony Stimulating Factor (M-CSF), also known as CSF-1, is a secreted cytokine which influences hematopoietic stem cells to differentiate into macrophages or other related cell types. M-CSF (or CSF-1) is a hematopoietic growth factor that is involved in the proliferation, differentiation, and survival of monocytes, macrophages, and bone marrow progenitor cells. It can also affect macrophages and monocytes in several ways, including stimulating increased phagocytic and chemotactic activity, and increased tumour cell cytotoxicity. The role of M-CSF is not only restricted to the monocyte/macrophage cell lineage. By interacting with its membrane receptor (CSF1R or M-CSF-R encoded by the c-fms proto-oncogene), M-CSF also modulates the proliferation of earlier hematopoietic progenitors and influence numerous physiological processes involved in immunology, metabolism, fertility and pregnancy. Besides, Colony Stimulating Factor Receptor, Macrophage (M-CFS-R) has been identified as an interactor of M-CSF, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse M-CSF and recombinant mouse MCFSR. Briefly, M-CSF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to M-CFS-R-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-M-CSF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of M-CSF and M-CFS-R was in a dose dependent manner.