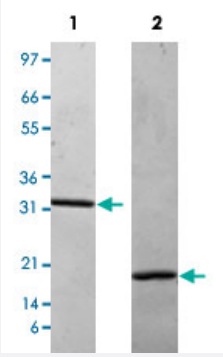
Bioactive

CSF1 (Human) Recombinant Protein

Catalog # P4421 Size 10 ug

Applications



Lane 1: non-reducing conditions
Lane 2: reducing conditions

Result of activity analysis

Result of activity analysis

Serial dilutions of human CSF1, starting at 50 ng/mL, were added to NSF-60 cells. Cell proliferation was measured after 44 hours and the linear portion of the curve was us used to calculate the ED50.

Specification

Product Description	Human CSF1 (P09603) recombinant protein expressed in *Escherichia coli*.
Sequence	MEEVSEYCSHMIGSGHLQSLQRLIDSQMETSCQITFEFVDQEQLKDPVCYLKKAFLLVQDIMEDT MRFRDNTPNAIAIVQLQELSLRLKSCFTKDYEEHDKACVRTFYETPLQLLEKVKNVFNETKNLLDK DWNIFSKNCNNSFAECSSQGHERQSEGS
Host	Escherichia coli
Theoretical MW (kDa)	36.8
Form	Lyophilized
Preparation Method	*Escherichia coli* expression system

Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the dose-dependent proliferation of mouse NFS-60 cells. The expected ED_{50} for this effect is 1.4-2.1 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	Lyophilized from 10 mM Na_2PO_4, 50 mM NaCl, pH 8.0
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterilized water, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis Serial dilutions of human CSF1, starting at 50 ng/mL, were added to NSF-60 cells. Cell proliferation was measured after 44 hours and the linear portion of the curve was us used to calculate the ED50.

Applications

- Functional Study
- SDS-PAGE

Gene Info — CSF1

Entrez GeneID	1435
Protein Accession#	P09603
Gene Name	CSF1
Gene Alias	MCSF, MGC31930
Gene Description	colony stimulating factor 1 (macrophage)
Omim ID	120420
Gene Ontology	Hyperlink

Gene Summary	The protein encoded by this gene is a cytokine that controls the production, differentiation, and function of macrophages. The active form of the protein is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. The encoded protein may be involved in development of the placenta. Four transcript variants encoding three different isoforms have been found for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000013362|OTTHUMP00000013363|OTTHUMP00000013364|colony stimulating factor 1|macrophage colony stimulating factor

Pathway

- Cytokine-cytokine receptor interaction
- Hematopoietic cell lineage

Disease

- Alzheimer disease
- Cardiovascular Diseases
- Chorioamnionitis
- Coronary Artery Disease
- Diabetes Mellitus
- Edema
- Fetal Membranes
- Genetic Predisposition to Disease
- Inflammation
- Kidney Failure
- Neoplasms
- Obstetric Labor
- Osteitis Deformans
- Ovarian Neoplasms
- Periodontitis

- Pre-Eclampsia
- Premature Birth