

Recombinant Rat CSF1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52549

Size: 10ug, 100ug

Protein Name: Macrophage colony-stimulating factor 1 (CSF-1) (MCSF) (Proteoglycan macrophage colony-stimulating factor) (PG-M-CSF) [Cleaved into: Processed macrophage colony-stimulating factor 1; Macrophage colony-stimulating factor 1 43 kDa subunit]

Synonym: Csf1, Csfm

UniProt ID: Q8JZQ0

UniProt Link: www.uniprot.org/uniprotkb/Q8JZQ0/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 566 AA

Molecular Weight: 62 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTARGAAGRCPSSTWMGSRLLLVCLLVSRVAEVSEHCSHMIGNHGLQILQQQLIDSQMETACLIEYK
FVDQEQLD DPVCYLKKAFLVQVII EETMRFKDNTPNANATERLQELSMKLN SCFIKDYKEQNEACV
QTYKESPLRLLEKIKNFFNETKNFLEKDOWNIFSKNCNDSFAKCSSRDVVT KPCNCLYPKATPSSDLA
SASPHQPPAPSMAPLADLAWDDSQRT EGSSLLPSDLPLRIEDPGSAKQRPPRSTCQTLESTEQPNH
EDPQPHPSAGAPIPGVEDII ESSMGTNWVLEEASGEASEGFLTQERKFSPSNPVGGSIQAETDRPW
ARSASSPFPKLTEDQQPTNITDTPLEVNPMRPTGQTLNNTPEKTDGSSTLREDQQEPRSPHFATLN
PQRVGNSATPYAKLLPPKSHSWGIVLPLGELEGKKSTRDRRSPAELKGGPASEGAARPVAQSTRDR
RSPAELKGGPASEGAARPVARFNSIPLTDTGSSIQDPQTSAFVFWVLGIILVLLAVGGLLFYSWKRRS
HRDPRTL DSSVGRPEGSSLAQDEDRQVELPV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Macrophage colony-stimulating factor 1 (CSF-1) (MCSF) (Proteoglycan macrophage colony-stimulating factor) (PG-M-CSF) [Cleaved into: Processed macrophage colony-stimulating factor 1; Macrophage colony-stimulating factor 1 43 kDa subunit] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Cytokine that plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of pro-inflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development. Required for normal male and female fertility. Promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration. Plays a role in lipoprotein clearance (By similarity).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein .; [Processed macrophage colony-stimulating factor 1]: Secreted, extracellular space .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.