Recombinant human M-CSF R/CD115 protein

Catalog Number: ATGP3794

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
20-517aa

UniProt No.
P07333

NCBI Accession No.
NP_005202.2

Alternative Names
Macrophage colony-stimulating factor 1 receptor, CSF1R, C-FMS, CD115, CSF-1R, CSFR, FIM2, FMS, HDLS, M-CSF-R

PRODUCT SPECIFICATION

Molecular Weight
82.1 kDa (737aa)

Concentration
0.25mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Measured by its ability to inhibit proliferation using M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED50 range ≤100ng/ml with Human M-CSF.

Tag
hIgG-His-Tag

Application
SDS-PAGE, Bioactivity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

CSF1R, also known as macrophage colony-stimulating factor 1 receptor, is a member of the type 3 subfamily of receptor tyrosine kinases. It is expressed primarily on cells of the monocyte and macrophage lineage, stem cells, and in the developing placenta and mediates most of the biological effects of this cytokine. This protein is consisted by an extracellular ligand-binding domain, a single membrane-spanning segment, and an intracellular tyrosine kinase domain. CSF1 and this receptor were initially implicated as essential for normal monocyte development as well as for trophoblastic implantation. This apparent role of CSF1/CSF1R in normal mammary gland development is very intriguing because this relationship has also been found in the biology of breast cancer in which abnormal expression of CSF1 and its receptor. Also, increased levels of CSF1R are found in microglia in Alzheimer's disease and after brain injuries. The increased receptor expression causes microglia to become more active. Recombinant human CSF1R, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

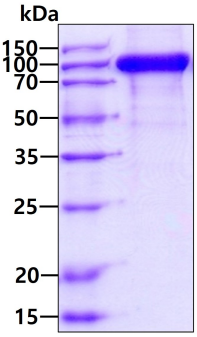
IPVIEPSVPE LVVKPGATVT LRCVGNGSVE WDGPPSPHWT LYSDGSSSIL STNNATFQNT GTYRCTEPGD PLGGSAAIHL YVKDPARPWN VLAQEVVVFE DQDALLPCLL TDPVLEAGVS LVRVRGRPLM RHTNYSFSPW HGFTIHRAKF IQSQDYQCSA LMGGRKVMSI SIRLKVQKVI PGPPALTLVP AELVRIRGEA AQIVCSASSV DVNFDVFLQH NNTKLAIPQQ SDFHNNRYQK VLTLNLDQVD FQHAGNYSCV ASNVQGKHST SMFFRVVESA YLNLSSEQNL IQEVTVGEGL NLKVMVEAYP GLQGFNWTYL GPFSDHQPEP KLANATTKDT YRHTFTLSLP RLKPSEAGRY SFLARNPGGW RALTFELTLR YPPEVSVIWT FINGSGTLLC AASGYPQPNV TWLQCSGHTD RCDEAQVLQV WDDPYPEVLS QEPFHKVTVQ SLLTVETLEH NQTYECRAHN SVGSGSWAFI PISAGAHTHP PDEFLFTP<LE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTTPP VLDSDGSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG KHHHHHH>

General References

Yeung YG., et al, (1998) J Biol Chem. 273:17128-17137.
Sapi E., et al, (1999) Proc Soc Exp Biol Med. 220:1-8.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity

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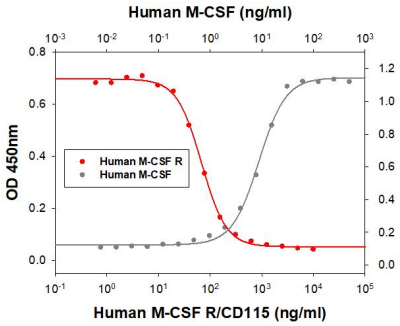

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