
Product Data Sheet

Product Name: MCSFR Human
 Cat. No.: GP20739
 Batch No.: 1

Product Data

Purity	>98%	Source	Sf9, Baculovirus cells.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Macrophage colony-stimulating factor 1 receptor; CSF-1 receptor (EC:2.7.10.1); CSF-1-R; CSF-1R; M-CSF-R; Proto-oncogene c-Fms; CD115; CSF1R; FMS.		
Amino Acid Sequence	<p>IPVIEPSVPE LVKPGATVT LRCVGNGSVE WDGPPSPHWT LYSDGSSSIL STNNATFQNT GTYRCTEPGD PLGGSAIHL YKDPARPWN VLAQEVVFE DQDALLPCLL TDPVLEAGVS LVRVRGRPLM RHTNYSFSPW HGFTIHRAKF IQSQDYQCSA LMGGRKVMMSI SIRLKVQKVI PGPPALTLVP AELVRIRGEA AQIVCSASSV DVNFDVFLQH NNTKLAIPQQ SDFHNNRYQK VLTLNLDQVD FQHAGNYSCV ASNVQKGHST SMFFRVVESA YLNLSSSEQNL IQEVTVGEGL NLKVMVEAYP GLQGFNWTYL GPFSDHQPEP KLANATTKDT YRHTFTLSLP RLKPSEAGRY SFLARNPGGW RALTFELTLR YPPEVSVIWT FINGSGTLLC AASGYPQPNV TWLQCSGHTD RCDEAQVLQV WDDPYPEVLS QEPFHKVTVQ SLLTVETLEH NQTYECRAHN SVGSGSWAFI PISAGAHTHP PDEFLLFTPLE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTPPP VLDSGGSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG KHHHHHH.</p>		
Formulation	MCSFR protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.		

Introduction

MCSFR which is also familiar as CSF1R, is part of the type3 subfamily of receptor tyrosine kinases. MCSFR is expressed mainly on cells of the monocyte and macrophage lineage, stem cells, and in the growing placenta. Most of the biological effects of this

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

cytokine are mediated by MCSFR. MCSFR contains an extracellular ligand-binding domain, a single membrane-spanning segment, and an intracellular tyrosine kinase domain. Originally CSF1 and this receptor were implicated as vital for normal trophoblastic implantation as well as monocyte development. The role of CSF1/CSF1R in normal mammary gland development is actually very interesting since this connection has also been discovered in the biology of breast cancer with the results of abnormal expression of CSF1 and its receptor. Likewise, in Alzheimer's disease and after brain injuries an increased level of CSF1R was found in the microglia, which causes the microglia to become more active.

Biological Activity

Measured by its ability to inhibit M-CSF dependent proliferation of M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED50 for this effect is less or equal to 100ng/ml in the presence of 10ng/ml M-CSF.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

MCSFR produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 737 amino acids (20-517a.a.) and having a molecular mass of 82.1kDa. (Molecular size on SDS-PAGE will appear at approximately 70-100kDa). MCSFR is expressed with a 239 amino acid hIgG-His tag at C-Terminus and purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA