9051 Mira Mesa Blvd, #910094
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MCSFR Human

Colony Stimulating Factor 1 Receptor Human Recombinant
GRF0257

Product Overview

Name	MCSFR Human

Description

Colony Stimulating Factor 1 Receptor Human Recombinant

Accession (Primary)	P07333

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.

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 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.

Source

Sf9, Baculovirus cells.

Physical Appearance

Sterile filtered colorless solution.

Formulation

MCSFR protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

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.

Purity

Greater than 90.0% as determined by SDS-PAGE.

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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.

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 10 ng/ml M-CSF.

Precautions

MCSFR Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P07333)