

Product Specification Sheet

G-CSF receptor (G-CSFR/GCSFR/CSF3R) Antibodies

Cat. GCSFR14-M	Mouse monoclonal Anti-Human G-CSFR IgG (aff pure)	SIZE: 100 ug
Cat. GCSFR14-C	Recombinant purified human G-CSFR protein control for WB	SIZE: 100 ul

GRANULOCYTE COLONY-STIMULATING FACTOR (G-CSF or G-CSF) or COLONY-STIMULATING FACTOR 3 (CSF3), is a glycoprotein that is produced and secreted by macrophages stimulated with Endotoxin. Cell activation by G-CSF is mediated by a type I membrane protein belonging to the cytokine receptor superfamily. Human G-CSF R is 863 aa (23-aa signal peptide, 604 aa extracellular domain, a 26 aa transmembrane domain, and a 183 aa cytoplasmic domain). As a result of alternative splicing, at least four isoforms of G-CSF R that differ in their C-terminal region exist. Isoform 2 lacks the transmembrane region and may represent a **soluble form** of the receptor; however the existence of soluble G-CSF R in human serum has not been reported. Human and mouse G-CSF R have a homology of 62.5%. G-CSF R is expressed in mature neutrophils, neutrophilic precursors, myeloid leukemia cells, and placenta. Binding of G-CSF to its receptor induces dimerization or oligomerization of the receptor activating cytoplasmic tyrosine kinases. Signal transduction from pathways that involve Janus tyrosine kinases/signal transducer and activator of transcription proteins (Jak1, Jak2, and Tyk2/STAT3, STAT3, and STATG), src-related protein tyrosine kinases (Lyn and Syk), Ras/MAP kinase, and phosphatidylinositol have been reported to be activated upon G-CSF stimulation.

on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+1% Trehalose
Reconstitute powder 100 ul PBS

Storage

Short-term: unopened, undiluted liquid vials at -200C and powder at 4oC or -20oC..

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-3 ug/ml for affinity pure using Chemiluminescence technique).

ELISA (1:10K-1:100K; using 50-100 ng of control protein/well).

Histochemistry & Immunofluorescence: not tested.

Flow Cytometry: recommended concn is ~20-30 ug/ml in human PBMC cells.

Specificity & Cross-reactivity

Anti-human GCSFR14-M has poor crossreactivity with mouse or rat G-CSFR. No significant crossreactivity is observed with GSF, IL-6, CNTF or OSM or other cytokines. Antibody crossreactivity in various species is not established. Control protein (Cat # GCSFR14-C is available for control studies.

General References: Nagata S (1986) Nature 319, 415-418; Develin JJ (1987) J. Leukocyte Biol. 41, 302-306; Souza LM (1986) Science 232, 61-66;

*This product is for in vitro research use only.

Related material available from ADI

Mouse and Human GCSF ELISA Kits
Anti-Mouse and Human GCSF and GCSFR
Recombinant mouse and human GCSF and GCSFR

GCSFR14-M-C 80603A

Source of Antigen and Antibodies

Antigen	Recombinant purified human GCSFR protein EC domain (1-621 aa)
Ab Host/type	Mouse monoclonal purified IgG #GCSF14-M (IgG1) purified over Protein A/G-agarose
2-Ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Human G-SCFR extracellular domain (1-621 aa) was expressed in NSO cells and purified (>95%). For Western blot +ve control (**Cat # GCSFR14-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **GCSFR14-C** for good visibility with antibody Cat # **GCSFR14-M**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **GCSFR14-C** solution prior to heating and loading

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