# **Anti-GCSF Receptor Antibody**

# HA500282



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, FC
Molecular Wt:	Predicted band size: 92 kDa
Description:	Receptor for granulocyte colony-stimulating factor (CSF3), essential for granulocytic maturation. Plays a crucial role in the proliferation, differientation and survival of cells along the neutrophilic lineage. In addition it may function in some adhesion or recognition events at the cell surface. Mutations in CSF3R acquired in multipotent hematopoietic progenitor cells and resulting in truncated hyper-responsive forms of the receptor, have been identified in most cases of severe congenital neutropenia (SCN). Patients carrying these mutations are at risk for developing myelodysplastic syndromes and/or acute myeloid leukemia. Constitutive mutations leading to hyporesponsive forms of the receptor are responsible for the refractoriness to CSF3 treatment observed in some SCN patients.
lmmunogen:	Synthetic peptide within human GCSF Receptor aa 787-836.
Positive control:	HL-60 cell lysate, THP-1 cell lysate, SH-SY5Y cell lysate, Hela, THP-1.
Subcellular location:	Secreted, Cell membrane.
Database links:	SwissProt: Q99062 Human
Recommended Dilutions: WB IF-Cell FC	1:500-1:2,000 1:50-1:200 1:500-1:1,000
Storage Buffer:	PBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4 $^\circ\!\mathrm{C}$ after thawing. Aliquot store at -20 $^\circ\!\mathrm{C}$ . Avoid repeated freeze / thaw cycles.
Purity:	Immunogen affinity purified.

# Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

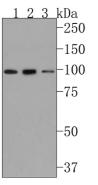
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

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#### Images

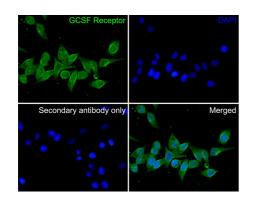


**Fig1:** Western blot analysis of GCSF Receptor on different lysates with rabbit anti-GCSF Receptor antibody (HA500282) at 1/500 dilution.

Lane 1: HL-60 cell lysate Lane 2: THP-1 cell lysate Lane 3: SH-SY5Y cell lysate

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500282, 1/500) was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

Predicted band size: 92 kDa Observed band size: 92 kDa



**Fig2:** ICC staining of GCSF Receptor in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (HA500282, 1/200) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

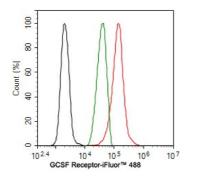


Fig3: Flow cytometric analysis of THP-1 cells labeling GCSF Receptor.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA500282, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4°C for an hour, the cells were stained with a iFluor<sup>TM</sup> 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4°C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Geng D. et. al. GCSF receptor regulates antigen uptake and expression of cytokines and costimulatory molecules in dendritic cells. Mol Immunol. 2007 Jan
- 2. Honjo E. et. al. Crystallization of a 2:2 complex of granulocyte-colony stimulating factor (GCSF) with the ligandbinding region of the GCSF receptor. Acta Crystallogr Sect F Struct Biol Cryst Commun. 2005 Aug

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