

# Recombinant Rhesus Macaque Granulocyte Colony Stimulating Factor (rRhG-CSF)

## PrimeGene Technical Data Sheet

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| <b>Catalog Number:</b>          | 112-02   |
| <b>Source:</b>                  | <i>Escherichia coli</i> .  |
| <b>Molecular Weight:</b>        | Approximately 18.9 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.  |
| <b>Quantity:</b>                | 2µg/10µg/1000µg  |
| <b>AA Sequence:</b>             | TPLGPASSLP QSFLKCLEQ VRKIQGDGAA LQEKLCATYK LCHPEELVLL RHSLGIPWAP<br>LSSCPSQALQ LTGCLSQLHS SLFLYQGLLQ ALEGISPELS PTLDTLQLDI ADFATTIWQQ<br>MEDLGMAPAL QPTQGAMPAF TSAFQRRAGG VLVASHLQRF LELAYRVLRH LAQS   |
| <b>Purity:</b>                  | > 98 % by SDS-PAGE and HPLC analyses.  |
| <b>Biological Activity:</b>     | Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using murine NFS-60 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>7</sup> IU/mg.  |
| <b>Physical Appearance:</b>     | Sterile Filtered White lyophilized (freeze-dried) powder.  |
| <b>Formulation:</b>             | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.   |
| <b>Endotoxin:</b>               | Less than 0.1 EU/µg of rRhG-CSF as determined by LAL method.   |
| <b>Reconstitution:</b>          | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| <b>Shipping:</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  |
| <b>Stability &amp; Storage:</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>                                 |
| <b>Usage:</b>                   | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>   |

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### ***Rhesus Macaque Granulocyte Colony Stimulating Factor***

Granulocyte colony stimulating factor (G-CSF) is a pleiotropic cytokine and mainly produced by monocytes and macrophages upon activation by endotoxin, TNF- $\alpha$  and IFN- $\gamma$ . Besides, many other cell types can secrete this protein after LPS, IL-1 or TNF- $\alpha$  activation, which are fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells. Various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. G-CSF is cytokine that acts in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. In addition it may function in some adhesion or recognition events at the cell surface.