

## Active Recombinant Pig CSF3 protein, His-tagged

**Cat. No.** CSF3-7112P    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Active Recombinant Pig CSF3 protein(O02837)(34~193 aa), fused with N-terminal His tag, was expressed in HEK293.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>          | Pig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>ProteinLength</b>    | 34-193 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Form</b>             | Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Bio-activity</b>     | G-CSF is a pleiotropic cytokine best known for its specific effects on the proliferation, differentiation, and activation of hematopoietic cells of the neutrophilic granulocyte lineage. It is produced mainly by monocytes and macrophages upon activation by endotoxin, TNF-alpha and IFN-gamma. In addition, various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. In vitro, G-CSF stimulates growth, differentiation and functions of cells from the neutrophil lineage. Consistent with its in vitro functions, G-CSF has been found to play important roles in defense against infection, in inflammation and repair, and in the maintenance of steady state hematopoiesis. The activity of G-CSF is usually measured by a cell proliferation assay using M-NFS 60 mouse myelogenous leukemia lymphoblast cells. M-NFS 60 cells were seeded into triplicate wells of 96-well plates at a density of 8,000 cells/well with 2% serum standard 1640 which contains various concentrations |

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of recombinant pig G-CSF. After incubated for 3 days, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10  $\mu$ l of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2-4 hours at 37°C. Proliferation of M-NFS-60 cells after incubation with G-CSF for 3 days observed by inverted microscope was shown. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant pig G-CSF for 3 days. It was obvious that G-CSF significantly increased cell viability of M-NFS-60 cells. The EC50 is 0.3 ng/ml.

|                       |                                                                                                            |
|-----------------------|------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | 19.0kDa                                                                                                    |
| <b>Endotoxin</b>      | <1.0EU per 1 $\mu$ g (determined by the LAL method).                                                       |
| <b>Purity</b>         | > 80% as determined by SDS-PAGE.                                                                           |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months. |
| <b>Reconstitution</b> | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                       |

## GENE INFORMATION

|                        |                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | CSF3 colony stimulating factor 3 (granulocyte) [ <i>Sus scrofa</i> ]                           |
| <b>Official Symbol</b> | CSF3                                                                                           |
| <b>Synonyms</b>        | CSF3; colony stimulating factor 3 (granulocyte); granulocyte colony-stimulating factor; G-CSF; |

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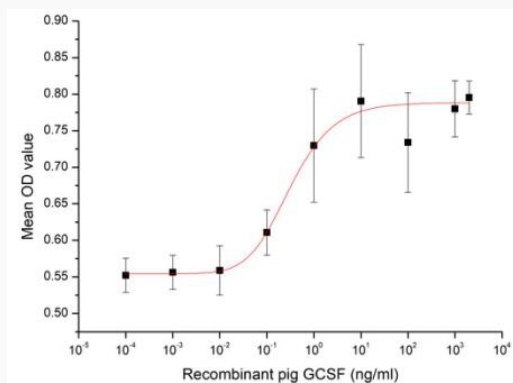
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**Gene ID** 396839

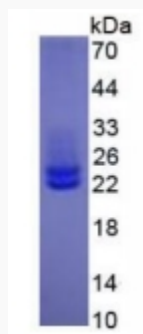
**mRNA Refseq** NM\_213842

**Protein Refseq** NP\_999007

### Activity



### SDS-PAGE



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