

TECHNICAL DATA SHEET

Recombinant Human G-CSF (Carrier-free)

Catalog Number: 21-8309

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human G-CSF (Carrier-free)

DESCRIPTION

Granulocyte colony stimulating factor (G-CSF) is a pleiotropic cytokine best known for its role in stimulating the proliferation and differentiation of granulocytes from bone marrow precursors. Human G-CSF is produced mainly by activated monocytes and macrophages and is involved in the immune response to infection and inflammation.

MOLECULAR MASS

Recombinant Human G-CSF is an 18.7 kDa protein composed of 174 amino acid residues.

AMINO ACID SEQUENCE

TPLGPASSLP QSFLKCLEQ VRKIQGDGAA LQEKLCATYK LCHPEELVLL GHSLGIPW APLSSCPSQA LQLAGCLS QL HSGLFLYQGL LQALEGISPE LG PTLDTL QLDVADFATT IWQQMEELGM APALQPTQGA MPAFASAFQR RAGG VLVA SHLQSFLEVS YRVLRLHAQP

SOURCE

E. Coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Monkey, Mouse, Pig

BIOACTIVITY

The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of Mouse NFS-60 cells is ≤0.1 ng/ml, corresponding to a specific activity of ≥1 x 10⁷ units/mg.

RESEARCH AREAS

AIDS/HIV; Angiogenesis/Cardiovascular; Cancer; Diabetes / Weight Regulation; Inflammation; Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Miyatake S, T Otsuka, T Yokota, F Lee and K Arai 1985 EMBO J 4(10): 2561-2568. Kitamura T, T Tange, T Terasawa, S Chiba, T Kuwaki, K Miyagawa, YF Piao, K Miyazono, A Urabe and FJ Takaku 1989 Cell Physiol 140(2): 323-34.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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