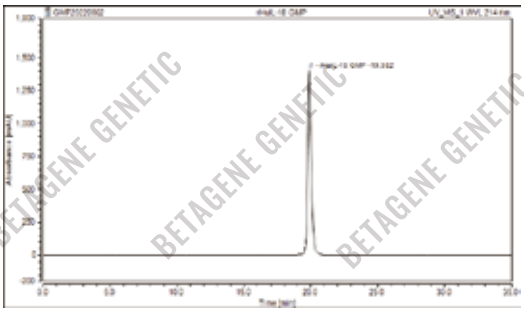
RECOMBINANT HUMAN IL-18 TAG-FREE GMP

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Gene ID	3606
Description	Interleukin-18 (IL-18) is a proinflammatory cytokine in the IL-1 family that exerts distinct immune effects depending on the local cytokine environment. It is expressed as a 24 kDa precursor by endothelial and epithelial cells, keratinocytes, gamma δ T cells, and phagocytes. The precursor is activated intracellularly by Caspase-1 mediated proteolysis to release the 17 kDa mature cytokine. The precursor can also be released by necrotic cells for extracellular cleavage by multiple proteases.
Catalog Number	GE10.1/GE10.2
Unit Size	50μg/100μg
Source	E. coli
Molecular Weight	Approximately 18.2 kDa, a single non-glycosylated polypeptide chain containing 157 amino acids.
AA Sequence	YFGKLESKLSVIRNLNDQVLFIDQGNRPLFEDMTDSDCRDNAPRTIFIISMYKDSQPRGMAVTISVKCEKISTLSCENKIISFKEMNPPDNIKDTKSDI IFFQRSVPGHDNKMQFESSSYEGYFLACEKERDLFKLILKKEDELGDRSIMFTVQNED
Purity (HPLC)	> 95%
Purity (SDS-PAGE)	> 98%
Biological Activity	Measured by its ability to induce IFN-γ secretion by KG-1 human acute myelogenous leukemia cells. The ED_{50} is approximately 1.5 - 15 ng/mL, corresponding to a specific activity of ≥ 3.0×10^6 Units/mg.
Host Cell DNA Residue	< 0.02 ng/μg of protein tested by DNA Fluorescent Staining method.
Host Cell Protein Residue	< 0.5 ng/μg of protein tested by ELISA.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, 0.02 % Tween-20, pH 7.0.
Sterility	Negative
Endotoxin	< 0.01EU/μg as determined by LAL gel-clot method.
Mycoplasma	Negative
Reconstitution	Before use this product, please read the direction below carefully. 1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. 2. Reconstitute in a sterile aqueous buffer to an appropriate concentration. 3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 ℃. Further dilutions should be made in appropriate buffered solutions.
Stability & Storage	For long term storage, the product should be stored ≤-20 ℃. **Please avoid repeated freeze-thaw cycles after reconstitution.** 1. At least 24 months from date of receipt, ≤-20 ℃ as supplied; 2. 1 month, 2 to 8 ℃ under sterile conditions after reconstitution; 3. 3 months, -20 to -70 ℃ under sterile conditions after reconstitution.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended.

E-mail: SALES@betagene.com
Address: 160 Basheng Rd., China (Shanghai) Free Trade Zone
TEL: 4009 204 254
WWW.BETAGENE.COM

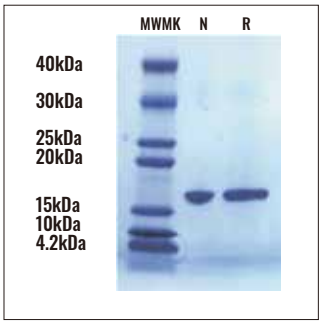
DATA



Purity of Recombinant Human IL-18

HPLC

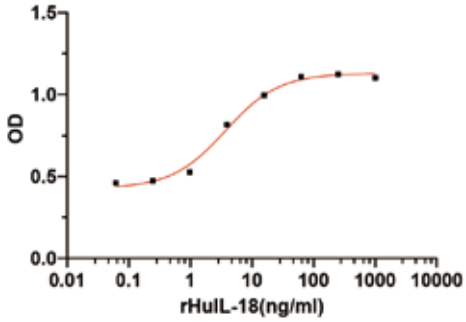
HPLC analysis of Recombinant Human IL-18. The major peak corresponds to the calculated purity of > 95%.



Purity of Recombinant Human IL-18

SDS-PAGE

4 μg/lane of Recombinant Human IL-18 was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing R band at 18kDa.



Bioactivity of Recombinant Human IL-18

Measured by its ability to induce IFN-γ secretion by KG-1 human acute myelogenous leukemia cells. The ED_{50} is approximately 1.5 - 15 ng/mL, corresponding to a specific activity of ≥ 3.0×10^6 Units/mg.

CONTENTS

Product	Cat. No.	Amount	Storage	Shelf life
Recombinant Human IL-18 (GMP-Grade)	GE10.1 GE10.2	50μg 100μg	≤-20°C	24 months

LIMITED WARRANTY

BETAGENE™ Genetic and/or its affiliate(s) warrant their products as set forth in the BETAGENE Genetic' General Terms and Conditions of Sale. If you have any questions, please contact our staff at SALES@betagene.com.

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, BETAGENE GENETIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Important Licensing Information: This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2022 BETAGENE Genetic Inc. All rights reserved. All trademarks are the property of BETAGENE Genetic and its subsidiaries unless otherwise specified.