CHASELECTION

Recombinant Human Interleukin-18/IL-18

Catalog Number：CYG044F0XXX、CY044F0XXX

Synonym： IGIF Protein, Human; IL-18 Protein,Human; IL-1g Protein, Human; IL1F4 Protein, Human; Interleukin 18 Protein, Human

Source： *E. coli*

Structure:

Gene ID: 3606

AA sequence:

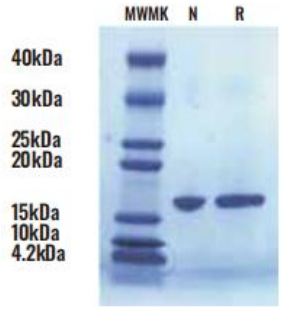
YFGKLESKLSVIRNLNDQVLFIDQGNRPLFEDM
TDSDCRDNAPRTIFIISMYKDSQPRGMAVTISVK
CEKISTLSCENKIISFKEMNPPDNIKDTKSDI
IFFQRSVPGHDNKMQFESSSYEGYFLACEKERD
LFKLILKKEDELGDRSIMFTVQNED

Molecular Weight :18.2 kDa

Purity:

≥95 % as determined by SDS-PAGE & HPLC.

SDS-PAGE



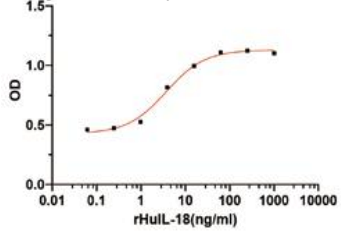
Under reduced (R) and non reduced (NR) conditions, SDS-PAGE was used to separate the protein, which showed a molecular weight of approximately 18 kDa and no foreign proteins were found

Endotoxin： ＜0.1 EU/μg

Formulation：

PBS pH7.0,0.02 % Tween-20,0.2μm membrane filtration for sterilization

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.

Reconstitution：

1. Before opening, please briefly centrifuge the contents to the bottom;
2. It is recommended to initially dissolve in sterile deionized water to an appropriate concentration (recommended concentration is 0.1-1mg/ml);
3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Storage：

If long-term storage is required, this product should be stored at ≤ -20 ℃, please avoid repeated freeze-thaw cycles.

1. Dry powder can be stored at ≤ -20 ℃ for at least 24 months;
2. After reconstitution, it can be stored for 1 month under sterile conditions at 2-8 ℃ ;
3. After reconstitution, it can be stored for 12 months under sterile conditions at -20~ -70℃.

Introduction：

Human IL-18 is a multifunctional cytokine with certain structural homology with the IL-1 family, produced by monocytes/macrophages. Human IL-18 exhibits species specificity and exhibits minimal activity in mouse systems. Like IL-12, it plays an important role in cell-mediated immune responses. As a co stimulator of Th1 like cells, IL-18 induces the production of IFN-α、GM-CSF and IL-2 and stimulates IL-2R expression and Th1 cell proliferation. In addition, IL-18 can enhance the cytotoxicity of natural killer (NK) cells and enhance allogeneic specific CTL activity.