# **CHAMOT**

Recombinant IL-18, Human, GMP

CM022-100HPG

CM022-1000HPG





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# **Product Datasheet**

# Recombinant IL-18, Human, GMP

Catalog#	CM022-100HPG	CM022-1000HPG
Size	100 ug	1 mg

# **Product Specifications**

18R) and initiate the recruitment and heterodimerization of the IL-18RAcP, leading to downstream activation of NF-κB. After stimulation with IL-18, multiple cytokines including IFN-y, IL-13, IL-4, IL-8, and GM-CSF and both Th1 and Th2 lymphokines could be produced

by different cells. As an immunoregulaory cytokine, IL-18 can promote development of T helper 1 (Th1) cells, which maximizes the production of IFN by synergistically stimulating to mature Th1 effectors in combination with IL-12. On the contrary, it inhibits the production of the anti-inflammatory cytokine IL-10. In addition, IL-18 exhibits multiple proinflammatory functions, such as increases in cell adhesion molecules, nitric oxide synthesis, and chemokine

Interleukin-18 (IL-18) belongs to the IL-1 superfamily and is constitutively produced by macrophages, dendritic cells (DCs) and other cells. IL-18 binds to the receptor of IL-18 (IL-

production.

**Synonyms** interleukin 18, IGIF, IL-1g, IL1F4, IL18

**Uniprot ID** Q14116

**Background** 

Molecular The protein has a calculated MW of 18.2 kDa. The protein migrates as 15 kDa under reducing Weight

condition (SDS-PAGE analysis).

**Expression** Escherichia coli **System** 

>97% as determined by SDS-PAGE analysis. **Purity** 

Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED50 for this effect is **Activity** 

<6 ng/mL.

**Endotoxin** < 0.05 EU per 1 µg of the protein by the LAL method. Level

YFGKLESKLSVIRNLNDQVLFIDQGNRPLFEDMTDSDCRDNAPRTIFIISMYKDSQPRGMAVTISVKCEK **Protein** ISTLSCENKIISFKEMNPPDNIKDTKSDIIFFQRSVPGHDNKMQFESSSYEGYFLACEKERDLFKLILKKEDE Sequence

**LGDRSIMFTVQNED** 

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. **Form** 

**Application** Cell Culture Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 0.5 mg/mL and incubate the stock solution at RT for at least 20 min to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

## Storage/Shipping

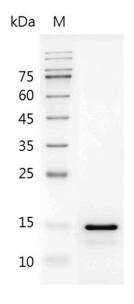
Stability & Storage

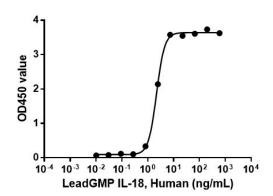
Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

**Shipping** 

Blue Ice

### **Scientific Data**





SDS- PAGE analysis of GMP human IL-18

GMP Human IL-18 Protein, Tag Free, E. coli induces IFN gamma secretion in KG-1 cells, with the ED $_{50}$ 

< 6 ng/mL.

For Research Use or Further Manufacturing Only

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