

Recombinant human IL-18

E. coli expressed human interleukin-18 with HSA

Cat. code: rcyec-hil18; rcyec-hil18-5

<https://www.invivogen.com/human-il18>

For research use only

Version 25C26-NJ

PRODUCT INFORMATION

Contents

Recombinant human IL-18 is provided as a lyophilized powder and is available in two quantities:

- **rcyec-hil18:** 10 µg
- **rcyec-hil18-5:** 50 µg (5 x 10 µg)

Note: This product is sterile filtered prior to lyophilization.

- 1.5 ml endotoxin-free water for rcyec-hil18 and rcyec-hil18-5

Storage and stability

- Recombinant human IL-18 is shipped at room temperature. Upon receipt, it should be immediately stored at -20 °C.
- Upon resuspension, prepare aliquots of recombinant human IL-18 and store at 4 °C for 1 week or at -20 °C to -80 °C for 12 months.

Note: Avoid repeated freeze-thaw cycles.

Quality control

- Purity: ≥ 95% (SDS-PAGE)
- Endotoxin level: < 10 EU/mg (LAL assay)
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.
- The biological activity of IL-18 is confirmed using HEK-Blue™ IL-18 cells.

Characteristics

- Alternate name: Iboctadekin, Interferon gamma-inducing factor
- Source: Bacterial; *Escherichia coli* (*E. coli*)
- Carrier: HSA (human serum albumin)
- Tag: Tag-free
- Accession number: Q14116
- Protein size: 157 a.a. (T37-D193)
- Molecular mass: ~ 18 kDa (SDS-PAGE)
- Formulation: Recombinant human IL-18 was lyophilized from a 0.2 µm filtered phosphate buffer saline (pH 7.4), 5% saccharose, 1% HSA.
- Solubility: 100 µg/ml in water

TESTED APPLICATIONS

- Cellular assays

PRODUCT DESCRIPTION

Interleukin 18 (IL-18), formerly called interferon-γ (IFN-γ) inducing factor, is a pro-inflammatory cytokine that causes a wide variety of biological effects associated with infection, inflammation, and autoimmune processes^{1, 2}. More specifically, IL-18 induces IFN-γ production and contributes to T-helper 1 (Th1) cell polarization.

Recombinant human IL-18 is a high-quality and biologically active cytokine, validated using proprietary IL-18 reporter cells. This member of the IL-1/TLR cytokine superfamily is produced in *E. coli* and thoroughly purified to remove endotoxins.

Recombinant human IL-18 can be used together with HEK-Blue™ IL-18 cells for the screening of inhibitory molecules, such as Camoteskimab, a monoclonal antibody targeting IL-18.

1. Yasuda K. *et al.*, 2019. Interleukin-18 in health and disease. *Int J Mol Sci.* 20(3). 2. Dinarello CA. *et al.*, 1998. Overview of interleukin-18: more than an interferon-gamma inducing factor. *J Leukoc Biol.* 63(6):658-64.

METHODS

Preparation of stock solution (100 µg/ml):

1. Add 100 µl of endotoxin-free water (provided) to 10 µg of recombinant human IL-18.
2. Mix gently by pipetting until completely resuspended.
3. Use immediately or prepare aliquots and store at -20 °C or -80 °C. Avoid freeze-thaw cycles.
4. Further dilutions can be prepared in the appropriate aqueous buffer, such as cell culture medium containing serum.

RELATED PRODUCTS

Product	Cat. Code
HEK-Blue™ IL-18 Cells	hkb-hmil18
Anti-hIL-18-hlgG1-FES	hil18-mab16

TECHNICAL SUPPORT

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