**PRODUCT INFORMATION**

**Content**
3 x 100 µg purified anti-hIL-18-IgG antibody, provided azide-free and lyophilized

**Target:** natural and recombinant human interleukin 18 (hIL-18)

**Clonality:** Monoclonal antibody

**Clone:** H7WM210

**Isotype:** Human IgG1

**Source:** CHO cells

**Formulation:** 0.2 µm filtered solution in a sodium phosphate buffer with saccharose, glycine and stabilizing agents

**Purity:** Purified by affinity chromatography with protein G

**Antibody resuspension**
Add 1 ml of sterile water per vial to obtain a concentration of 0.1 mg/ml.

**Storage**
- Product is shipped at room temperature. Store lyophilized antibody at -20 °C. Product is stable for at least 1 year.
- Reconstituted antibody is stable for 1 month when stored at 4 °C and for 1 year when stored at -20 °C. Avoid repeated freeze-thaw cycles.

**Quality control**
- This product has been validated for neutralization.
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

**DESCRIPTION**
Anti-hIL-18-IgG is a monoclonal antibody specific for human interleukin 18 (hIL-18). It has been selected for its ability to efficiently neutralize the biological activity of hIL-18. Anti-hIL-18-IgG was generated by recombinant DNA technology. It has been produced in CHO cells and purified by affinity chromatography.

**APPLICATIONS**
Anti-hIL-18-IgG is a neutralizing antibody, it blocks hIL-18-induced cellular activation.

**Neutralization**
The exact concentration of antibody required to neutralize hIL-18 activity is dependent on the cytokine concentration, cell type and growth conditions. InvivoGen has determined the neutralization dose for this antibody using recombinant hIL-18 and HEK-Blue™ IL-18 cells. These HEK293 cells stably express IL-18RAP, as well as an NF-kB and AP-1-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene.

**Procedure for neutralization using HEK-Blue™ IL-18 cells**
1. Prepare a cell suspension at ~300,000 cells/ml.
2. Add 20 μl of Anti-hIL-18-IgG or control antibody (1-100 ng/ml final) per well of a 96-well plate.
3. Add 20 μl recombinant human IL-18 (10 pg/ml final concentration).
4. Incubate 30 minutes at 37 °C.
5. Add 160 μl of cell suspension (~50,000 cells) per well.
6. Incubate overnight at 37 °C.
7. Add 20 μl of supernatant to 180 μl QUANTI-Blue™ in a 96-well plate.
8. Incubate 1-3 hours at 37 °C.
9. Assess SEAP levels with the naked eye or spectrophotometrically by reading the optical density (OD) at 655 nm.

**RELATED PRODUCTS**

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<td>Anti-β-Gal-hIgG1</td>
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<td>HEK-Blue™ IL-18 Cells</td>
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<td>QUANTI-Blue™</td>
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<td>Recombinant human IL-18</td>
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**BACKGROUND**
Interleukin 18 (IL-18; formerly called interferon-γ inducing factor) is a pro-inflammatory cytokine that causes a wide variety of biological effects associated with infection, inflammation and autoimmune processes. More specifically, IL-18 induces IFN-γ production and contributes to T-helper 1 (Th1) cell polarization. IL-18 is produced by macrophages and other cells, as a proprotein which is proteolytically processed to its active form by caspase 1, an enzyme that is activated within the inflammasome multiprotein complex. IL-18 binds to an heterodimeric receptor consisting of IL-18R and IL-18 receptor accessory protein (IL-18RAP). Upon binding, IL-18 activates NF-κB and AP-1 via signaling pathways that involve IRAK and TRAF-6.