**Anti-hIL-1β-IgG**

Neutralizing IgG monoclonal antibody against human interleukin-1 beta

Catalog # mabg-hil1b-3

For research use only, not for diagnostic or therapeutic use

Version # 15H28-MM

---

**PRODUCT INFORMATION**

**Content**

3 x 100 µg purified anti-hIL-1β-IgG antibody, provided azide-free and lyophilized

**Target:** natural and recombinant human interleukin-1 beta (IL-1β)

**Specificity:** no cross-reactivity with human IL-1α, mouse IL-1α or mouse IL-1β.

**Clone:** 4H5

**Isotype:** Mouse IgG1

**Immunogen:** Human IL-1β protein expressed in Swiss mice following DNA immunization

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

**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 aliquoted and 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-1β-IgG is a monoclonal antibody specific for human interleukin-1 beta (hIL-1β). This antibody has been selected for its ability to efficiently neutralize the biological activity of hIL-1β. Anti-hIL-1β-IgG is produced in hybridomas and purified by affinity chromatography.

**APPLICATIONS**

Anti-hIL-1β-IgG is a neutralizing antibody, it blocks hIL-1β-induced cellular activation. Other applications have not been tested.

**Neutralization**

The exact concentration of antibody required to neutralize hIL-1β activity is dependent on the cytokine concentration, cell type and growth conditions. InvivoGen has determined the neutralization dose for this antibody using recombinant hIL-1β and HEK-Blue™ IL-1β cells. These cells endogenously express the human IL-1 receptor and were stably transfected with an NF-κB inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene. Anti-hIL-1β-IgG (10 ng - 1 µg/ml) and a negative control antibody (e.g. Mouse IgG1 Control which targets E. coli β-galactosidase) were incubated with recombinant hIL-1β (1 ng/ml) for 30 min prior to the addition of the HEK-Blue™ IL-1β Cells. Neutralization of IL-1β-induced signaling by anti-hIL-1β-IgG was determined after a 24-hour incubation by assessing SEAP production using QUANTI-Blue™, a SEAP detection reagent. QUANTI-Blue™ turns blue following cytokine stimulation but remains pink if neutralization occurs. SEAP levels can be assessed by the naked eye or spectrophotometrically by reading the optical density at 620-655 nm.

**RELATED PRODUCTS**

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEK-Blue™ IL-1β Cells</td>
<td>hkb-il1b</td>
</tr>
<tr>
<td>Mouse IgG1 Control</td>
<td>mabg1-ctrlm</td>
</tr>
<tr>
<td>QUANTI-Blue™</td>
<td>rep-qb1</td>
</tr>
<tr>
<td>Recombinant human IL-1β</td>
<td>rhil-1b</td>
</tr>
</tbody>
</table>

---