Anti-hIL-17a-IgG
Neutralizing monoclonal antibody against human interleukin 17
Catalog # mabg-hil17a-3
For research use only, not for diagnostic or therapeutic use
Version # 15J15-MM

PRODUCT INFORMATION
Content: 3 x 100 µg purified anti-hIL-17a-IgG antibody, provided azide-free and lyophilized
Target: natural and recombinant human interleukin-17a (hIL-17a)
Specificity: Blocks human and mouse IL-17a. No cross-reactivity with human IL-17F and with human or mouse IL-17E.
Clone: 7G11
Isotype: Mouse IgG1
Immunogen: Human IL-17 protein expressed in Swiss mice following DNA immunization
Formulation: 0.2 µm filtered solution in a 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 aliquotted 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.

BACKGROUND
Interleukin 17A (IL-17A), a pro-inflammatory cytokine, belongs to a family of six cytokines; IL-17A, IL-17B, IL-17C, IL-17D, IL-E (also known as IL-25) and IL-17F. IL-17A binds a heterodimeric receptor (IL-17RA/IL-17RC), which recruits the adaptor Act1 leading to TRAF6 ubiquitylation, triggering a signaling cascade that results in NF-κB activation, a key regulator of innate immunity. Although this cytokine exerts a protective role against many pathogens, the overproduction of IL-17A is associated with autoimmune diseases, such as rheumatoid arthritis, psoriasis and inflammatory bowel disease; making this cytokine a pertinent target for monoclonal antibodies.


DESCRIPTION
Anti-hIL-17a-IgG is a monoclonal antibody specific for hIL-17a. This antibody has been selected for its ability to efficiently neutralize the biological activity of hIL-17a. Anti-hIL-17a-IgG is produced in hybridomas and purified by affinity chromatography.

APPLICATIONS
Anti-hIL-17a-IgG is a neutralizing antibody, it blocks hIL-17a-induced cellular activation. Other applications have not been tested.

Neutralization
The exact concentration of antibody required to neutralize hIL-17a activity is dependent on the cytokine concentration, cell type and growth conditions. InvivoGen has determined the neutralization dose for this antibody using recombinant hIL-17a and HEK-Blue™ IL-17 cells. These cells are HEK293 cells stably expressing the human IL-17RA/IL-17RC receptor, the Act1 adaptor molecule, and a NF-κB-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene.
Anti-hIL-17a-IgG (50 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-17a at 30 ng/ml for 30 min prior to the addition of the HEK-Blue™ IL-17 cells. Neutralization of IL-17a-induced signaling by anti-hIL-17a-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-17 Cells</td>
<td>hhb-il17</td>
</tr>
<tr>
<td>Mouse IgG1 Control</td>
<td>mabg1-ctrm</td>
</tr>
<tr>
<td>QUANTI-Blue™</td>
<td>rep-qb1</td>
</tr>
</tbody>
</table>

TECHNICAL SUPPORT
InvivoGen USA (Toll-Free): 888-457-5873
InvivoGen USA (International): +1 (858) 457-5873
InvivoGen Europe: +33 (0) 5-62-71-69-39
InvivoGen Hong Kong: +852 3-622-34-80
E-mail: info@invivogen.com