Anti-hIL-29-IgG
Neutralizing monoclonal antibody against human interleukin 29
Catalog # mabg-hil29-3
For research use only, not for diagnostic or therapeutic use
Version # 15C23-MM

PRODUCT INFORMATION
Content: 3 x 100 µg purified anti-hIL-29-IgG antibody, provided azide-free and lyophilized
Target: natural and recombinant human interleukin-29 (IL-29)
Specificity: Reacts with human IL-28A and human IL-28B. No cross-reactivity with mouse IL-28A or mouse IL-28B.
Note: An active IL-29 gene is absent in mice.
Clone: 6A11
Isotype: Mouse IgG2a
Immunogen: Human IL-29 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 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.

BACKGROUND
Interleukin-29 (IL-29) is a member of the type III interferon (IFN lambda) cytokine family, which comprises three members: IL-28A, IL-28B and IL-29. It should be noted that in the mouse genome IL-29 is a pseudogene. Type III IFNs exhibit several common features with type I IFNs: antiviral activity and antitumor activity. IL-29 is produced by monocytes and dendritic cells in response to viral infection and stimulation with toll-like receptor (TLR) ligands. IL-29 exerts its action following binding to a heterodimeric protein complex composed of two subunits, IL-28 receptor alpha and IL-10 receptor beta, leading to signaling through the Jak/Stat pathway and inducing the expression of IFN-stimulated genes.

DESCRIPTION
Anti-hIL-29-IgG is a monoclonal antibody against human interleukin 29 (hIL-29). This antibody has been selected for its ability to efficiently neutralize the biological activity of hIL-29. Anti-hIL-29-IgG is produced in hybridomas and purified by affinity chromatography.

APPLICATIONS
Anti-hIL-29-IgG is a neutralizing antibody, it blocks hIL-29-induced cellular activation. Other applications have not been tested.

Neutralization
The exact concentration of antibody required to neutralize hIL-29 activity is dependent on the cytokine concentration, cell type and growth conditions. InvivoGen has determined the neutralization dose for this antibody using recombinant hIL-29 and HEK-Blue™ IFN-α/β cells. These cells were generated by stable transfection of HEK293 cells with the human STAT2 and IRF9 genes to obtain a fully active type I IFN signaling pathway. They were further transfected with a SEAP (secreted embryonic alkaline phosphatase) reporter gene under the control of the IFN-α/β inducible ISG54 promoter.

Anti-hIL-29-IgG (50 ng-1 µg/ml) and a negative control antibody (e.g. Mouse IgG2a control) which targets E. coli β-galactosidase) were incubated with recombinant hIL-29 at 10 ng/ml for 30 min prior to the addition of the HEK-Blue™ IFN-α/β cells. Neutralization of IL-29-induced signaling by anti-hIL-29-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

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<td>Mouse IgG2a Control</td>
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<td>QUANTI-Blue™</td>
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