

# Validation data for Anti-hIL6R-To-hIgG1

<https://www.invivogen.com/anti-il6r-mabs>

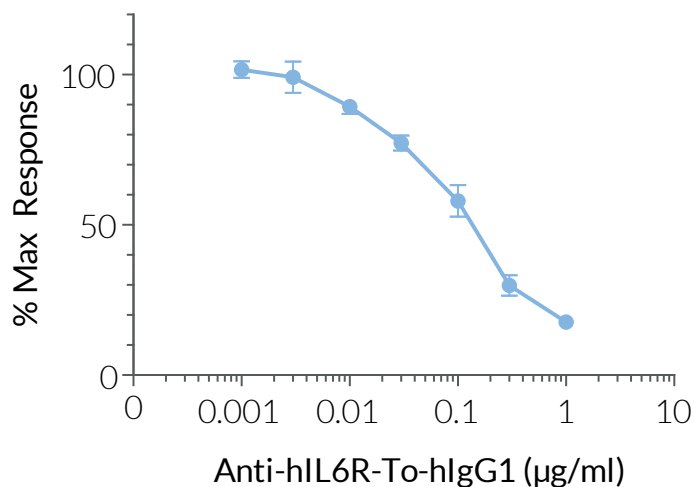
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Anti-hIL6R-To-hIgG1 is a recombinant monoclonal antibody (mAb) featuring the variable region of the clinically-relevant Tocilizumab (TCZ) and the human IgG1 constant region. TCZ specifically binds to both the soluble and membrane-bound human interleukin-6 receptor (hIL-6R). TCZ blocks the binding of IL-6 and thus, inhibits the downstream STAT3-dependent pro-inflammatory response. The inhibitory activity of Anti-hIL6R-To-hIgG1 has been validated using InvivoGen's HEK-Blue™ IL-6 cellular assay (Figure 1).

## Inhibition of IL-6 signaling by Anti-hIL6R-To-hIgG1

HEK-Blue™ IL-6 cells were generated by stable transfection of human embryonic kidney 293 (HEK293)-derived cells with the genes encoding human IL-6R and STAT3. Additionally, they encode a STAT3-inducible secreted embryonic alkaline phosphatase (SEAP) reporter gene. Upon IL-6 stimulation, HEK-Blue™ IL-6 cells trigger the activation of STAT3 and the subsequent secretion of SEAP. Anti-hIL6R-To-hIgG1 binds to IL-6R and specifically blocks the IL-6 stimulation of these cells in a dose-dependent manner.



**Figure 1: Dose-dependent inhibition of HEK-Blue™ IL-6 cellular response.** Anti-hIL6R-To-hIgG1 (0 - 1 µg/ml) was incubated with HEK-Blue™ IL-6 cells for 3 hours. Following this, human (h)IL-6 (0.3 ng/ml) was added to the cells. After overnight incubation, STAT3-dependent SEAP activity in the cell culture supernatant was assessed using QUANTI-Blue™ Solution, a detection reagent. Data are presented as percentage (%) of the maximum response.

### TECHNICAL SUPPORT

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