Validation data for HEK-Blue™ IL-19/IL-20 cells

https://www.invivogen.com/hek-blue-il20

For research use only

Version 23F29-AK

HEK-Blue™ IL-19/IL-20 reporter cells have been specifically designed to detect bioactive human (h) and murine (m) IL-19/IL-20, IL-22, and IL-24 by monitoring the activation of the JAK-STAT pathway. HEK-Blue™ IL-19/IL-20 cells were generated by stable transfection of the human embryonic kidney HEK293 cell line with the genes encoding human *IL-20Rα*, *IL-20Rβ*, and *STAT3* genes to obtain a fully active IL-19/IL-20 signaling pathway, as verified by functional assays **(Figure 1)**. Since IL-19 and IL-20 belong to the IL-10 cytokine family, the response of HEK-Blue™ IL-19/IL-20 cells to members of this cytokine family as well as other cytokines has been determined **(Figure 2)**. The ability to block the signaling of hIL-24 in HEK-Blue™ IL-19/IL-20 cells was assessed using an anti-hIL-24 neutralization monoclonal antibody (mAb) **(Figure 3)**.

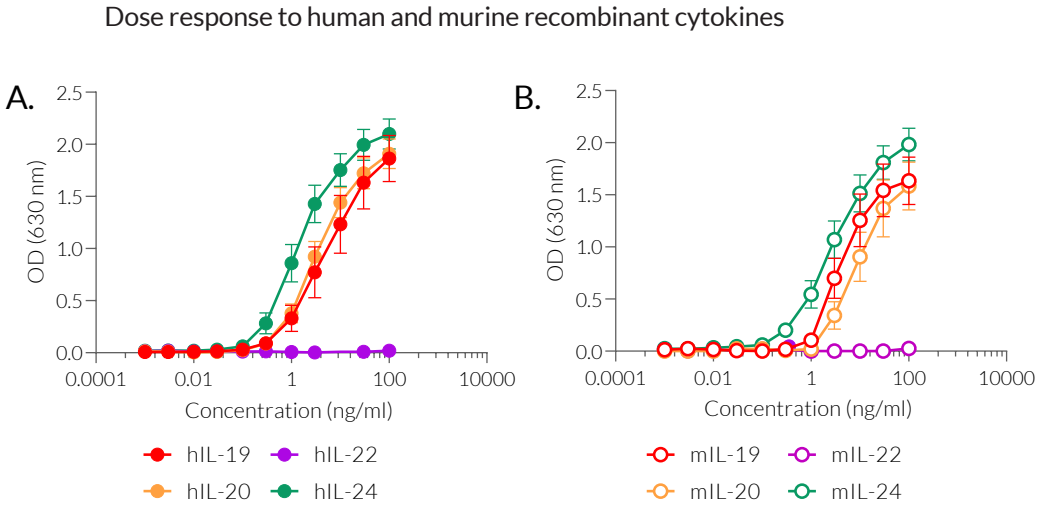

Figure 1. Dose-response of HEK-Blue™ IL-19/IL-20 cells to recombinant cytokines. Cells were stimulated with increasing concentrations of recombinant **(A)** human or **(B)** murine IL-19, IL-19/IL-20, IL-22, and IL-24. After overnight incubation, the NF-κB-induced SEAP activity was determined using QUANTI-Blue™ Solution, a SEAP detection reagent. Data are shown as optical density (OD) at 630 nm (mean ± SEM).

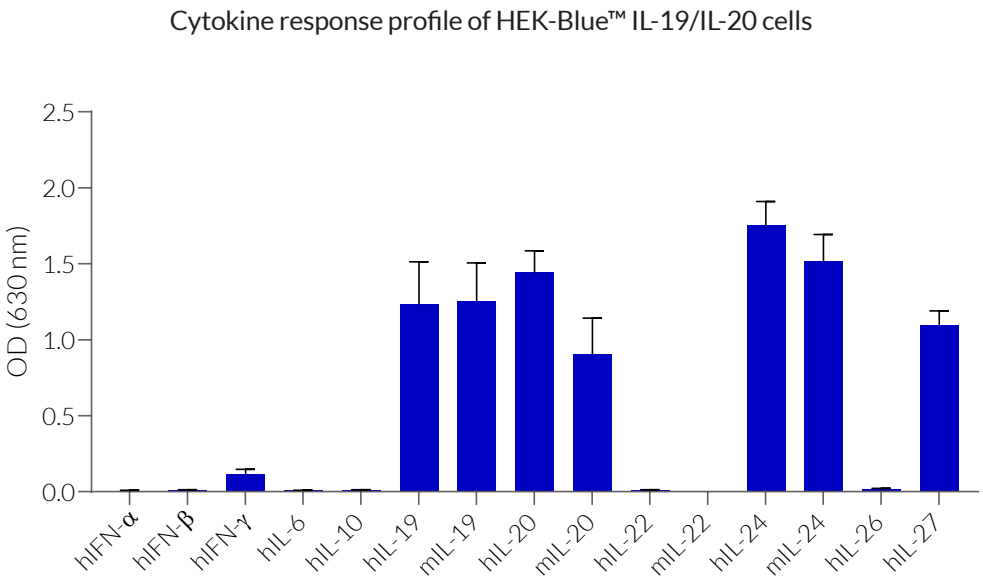

Figure 2. Cytokine response profile of HEK-Blue™ IL-19/IL-20 cells. Cells were stimulated with various human and murine recombinant cytokines: hIFN-α (1000 U/ml), hIFN-β (1000 U/ml), hIFN-γ (10 ng/ml), hIL-6 (10 ng/ml), hIL-10 (10 ng/ml), hIL-19 (10 ng/ml), mIL-19 (10 ng/ml), hIL-19/IL-20 (10 ng/ml), mIL-19/IL-20 (10 ng/ml), hIL-22 (10 ng/ml), mIL-22 (10 ng/ml), hIL-24 (10 ng/ml), mIL-24 (10 ng/ml), hIL-26 (10 ng/ml), and hIL-27 (10 ng/ml). After overnight incubation, the NF-κB-induced SEAP activity was determined using QUANTIBlue™ Solution. Data are shown as optical density (OD) at 630 nm (mean ± SEM).

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 Asia: +852 3622-3480
E-mail: info@invivogen.com

InvivoGen
www.invivogen.com

Inhibition of hIL-24 signaling in HEK-Blue™ IL-19/IL-20 cells

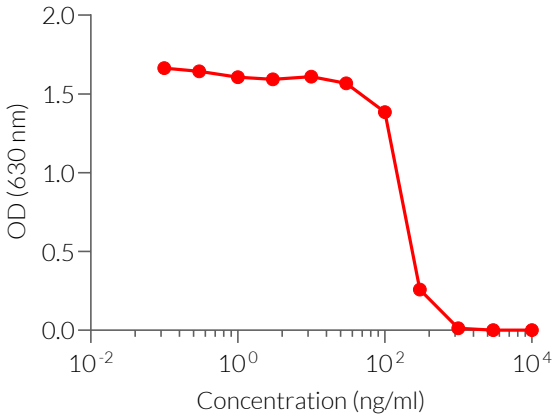

Figure 3. Inhibition of hIL-24 signaling in HEK-Blue™ IL-19/IL-20 cells. Increasing concentrations of an anti-hIL-24 neutralization mAb were incubated for 30 minutes with the recombinant cytokine hIL-24 (3 ng/ml) prior to the addition of HEK-Blue™ IL-19/IL-20 cells. After overnight incubation, SEAP activity in the cell culture supernatant was assessed using QUANTI-Blue™ Solution. Data are shown as optical density (OD) at 630 nm (mean ± SEM).

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 Asia: +852 3622-3480
E-mail: info@invivogen.com