

Validation data for B16-Blue™ IFN-γ cells

<https://www.invivogen.com/b16-blue-ifng>

For research use only

Version 21F18-MM

B16-Blue™ IFN-γ cells allow the detection of bioactive murine type II interferon, also known as murine IFN-γ (mIFN-γ), by monitoring the activation of the JAK/STAT/ISGF3 pathway. These cells derive from the murine B16 melanoma cell line of C57BL/6 origin after stable transfection with a SEAP (secreted embryonic alkaline phosphatase) reporter gene under the control of the IFN-inducible ISG54 promoter. B16-Blue™ IFN-γ cells respond specifically to mIFN-γ in a dose-dependent manner (figure 1) and do not respond to human IFN-γ (figure 2). Furthermore, due to the inactivation of the IFN-α/β receptor, they do not respond to mIFN-α/β (figure 2).

Cellular response to murine IFN-γ

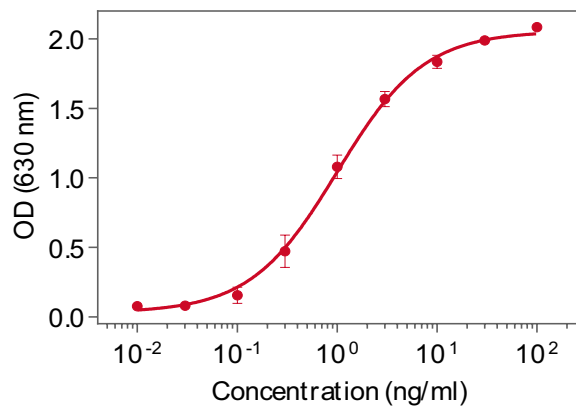


Figure 1. Dose-response of B16-Blue™ IFN-γ cells to recombinant murine IFN-γ. Cells were stimulated with increasing concentrations of recombinant murine IFN-γ. After overnight incubation, the ISGF3 response was determined using QUANTI-Blue™ Solution, a SEAP detection reagent, and reading the optical density (OD) at 630 nm. The OD at 630 nm is shown as mean ± SEM.

Cell line specificity

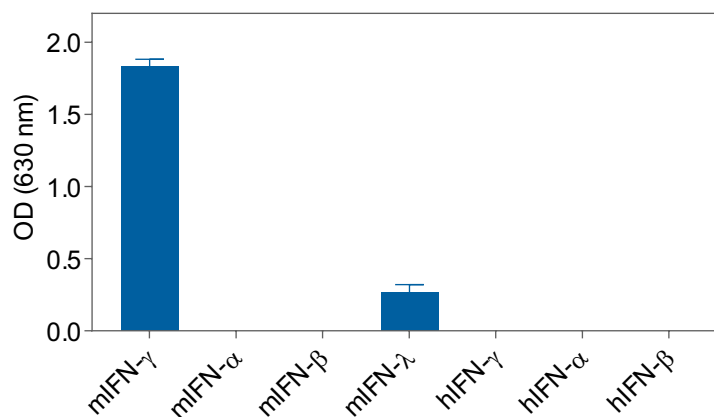


Figure 2. Response of B16-Blue™ IFN-γ cells to a panel of cytokines. Cells were stimulated with various human and murine recombinant cytokines: 10 ng/ml of mIFN-γ, mIFN-λ, hIFN-γ and 1000U/ml of mIFN-αA (also known as mIFN-α3), mIFN-β, hIFN-α2a, hIFN-β. After overnight incubation, SEAP activity was assessed using QUANTI-Blue™ Solution. The OD at 630 nm is shown as 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