

Validation data for HEK-Blue™ IL-4/IL-13 cells

<https://www.invivogen.com/hek-blue-il4-il13>

For research use only

Version 21B22-MM

HEK-Blue™ IL-4/IL-13 cells allow the detection of bioactive IL-4/IL-13 by monitoring the activation of the STAT-6 pathway. These cells were generated by the stable transfection of HEK293 cells with the human STAT6 gene and a STAT6-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene. For these cells, the detection range is 0.1-10 ng/ml for recombinant human IL-4 and 1-100 ng/ml for recombinant human IL-13 (see figure 1). These cells respond specifically to IL-4 and IL-13 (see figure 2).

Dose response of HEK-Blue™ IL-4/IL-13 cells to recombinant human IL-4 and IL-13

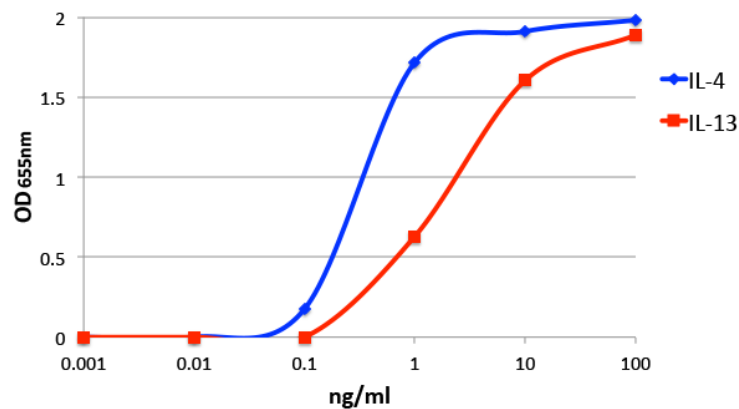


Figure 1: Stimulation of HEK-Blue™ IL-4/IL-13 cells by recombinant human IL-4 or IL-13. After a 24 h incubation, SEAP activity was assessed using QUANTI-Blue™ Solution and reading the optical density (OD) at 655 nm.

Ligand	EC50	Response ratio
Recombinant hIL-4	~ 0.7 ng/ml	25
Recombinant hIL-13	~ 2.0 ng/ml	28

Cytokine response profile of HEK-Blue™ IL-4/IL-13 cells

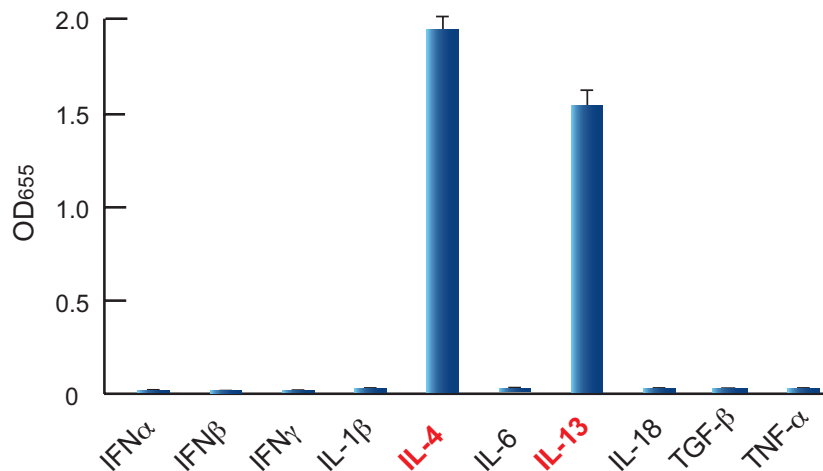


Figure 2: HEK-Blue™ IL-4/IL-13 cells were stimulated with various human recombinant cytokines; IFN-α (1000 IU/ml), IFN-β (1000 IU/ml), IFN-γ (1000 IU/ml), IL-1β (100 ng/ml), IL-4 (10 ng/ml), IL-6 (100 ng/ml), IL-13 (10 ng/ml), IL-18 (100 ng/ml), TGF-β (10 ng/ml), and TNF-α (100 ng/ml). After a 24 h incubation, SEAP activity was assessed using QUANTI-Blue™ Solution and reading the OD at 655 nm.

TECHNICAL SUPPORT

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