

Validation data for HEK-Blue™ CD40L cells

<https://www.invivogen.com/hek-blue-cd40l>

For research use only

Version 23J17-AK

HEK-Blue™ CD40L cells allow the detection of bioactive CD40L (CD40 Ligand) by monitoring the activation of the NF- κ B pathway. These cells were generated by the stable transfection of HEK293 cells with the human CD40 as well as SEAP reporter gene to obtain a fully active CD40-dependent signaling pathway. These cells respond strongly to human and murine CD40L (Figures 1 and 2). These cells can also be used to screen for molecules that inhibit CD40L signaling by using an anti-hCD40L-IgG antibody (Figure 3).

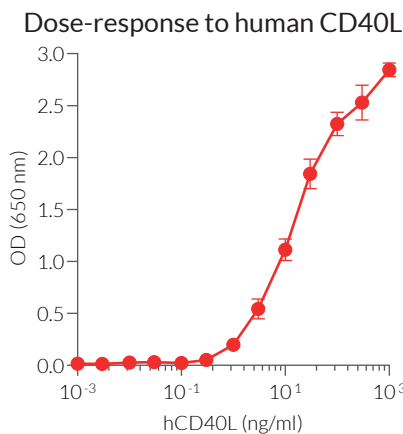


Figure 1. Dose-response of HEK-Blue™ CD40L cells to recombinant CD40L. Cells were stimulated with increasing concentrations of recombinant human (h)CD40L. After overnight incubation, the response was determined using QUANTI-Blue™, a SEAP detection reagent. The optical density (OD) at 650 nm is shown as mean \pm SEM.

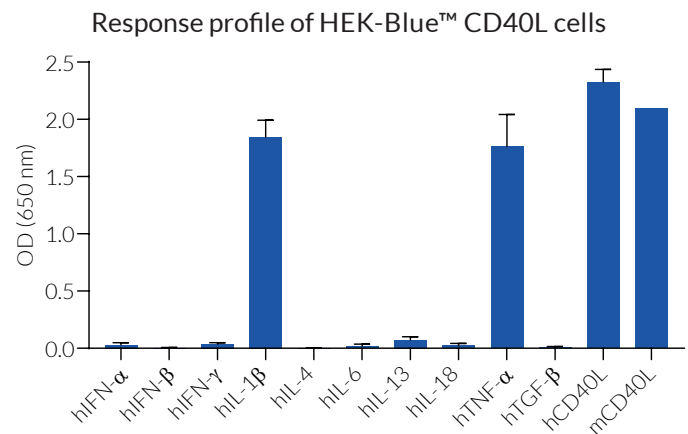


Figure 2. Response of HEK-Blue™ CD40L cells to a panel of cytokines. Cells were stimulated with various human recombinant cytokines: hIFN- α 2b or hIFN- β -1a (1000 U/ml), hIFN- γ (1 μ g/ml), hIL-1 β (1 ng/ml), hIL-4 (100 ng/ml), hIL-6 (100 ng/ml), hIL-13 (100 ng/ml), hIL-18 (100 ng/ml), hTNF- α (1 ng/ml), hTGF- β 1 (100 ng/ml), hCD40L (100 ng/ml), and mCD40L (100 ng/ml). After overnight incubation, SEAP activity was assessed using QUANTI-Blue™. The OD at 650 nm is shown as mean \pm SEM.

Neutralization of hCD40L response using Anti-hCD40L-IgG mAb

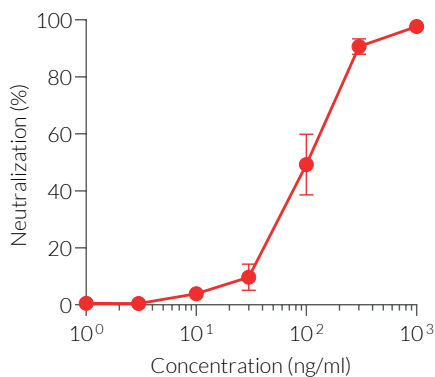


Figure 3. Dose-dependent inhibition of HEK-Blue™ CD40L cell response using Anti-hCD40L-IgG mAb. A serial dilution of Anti-hCD40L-hIgG monoclonal antibody (mAb) was incubated with 100 ng/ml of recombinant human CD40L for 30 minutes prior to the addition of the HEK-Blue™ CD40L cells. After overnight incubation, the SEAP response was determined using QUANTI-Blue™, a SEAP detection reagent. Data are presented as percentage of neutralization (mean \pm 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