# Validation data for recombinant murine IL-16

https://www.invivogen.com/human-mouse-il16

For research use only

Version 23E16-NJ

Interleukin 16 (IL-16) is a pro-inflammatory cytokine and alarmin. Its activity is mediated by the release of its C-terminal portion, after cleavage by caspase-3. InvivoGen provides an untagged and non-glycosylated recombinant murine IL-16 in its mature and intracellular form. Its size, purity, and ability to be detected by a specific anti-IL-16 monoclonal antibody were verified **(Figures 1 and 2)**. Importantly, InvivoGen's recombinant mIL-16 is guaranteed free of bacterial contaminations (e.g. lipoproteins and endotoxins) which could interfere with IL-16 specific signaling in TLR2- and TLR4-expressing target cells **(Figure 3)**.

## Detection by SDS-PAGE and WES

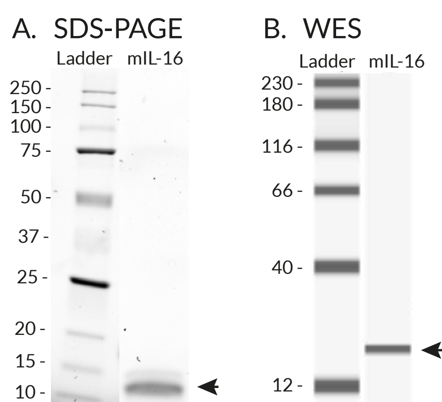


**Figure 1: SDS PAGE and WES analysis of the recombinant murine (m)IL-16 protein. (A)** 0.5 µg of mIL-16 was loaded on a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions. A band was detected at ~14 kDa. **(B)** 4 µg of mIL-16 was analyzed by WES using InvivoGen's anti-mIL-16 hIgG1e3 antibody, followed by an HRP-conjugated anti-mouse secondary antibody. A band was detected at ~21 kDa.

## Detection by ELISA

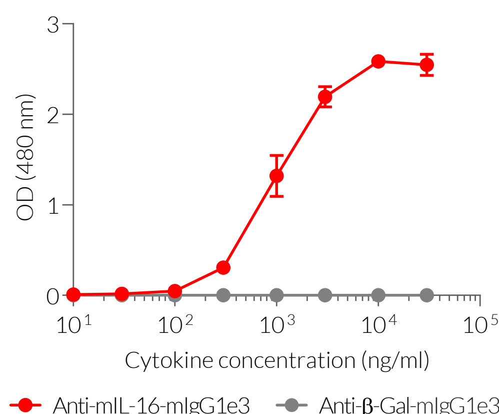


**Figure 2: Detection of the recombinant murine (m)IL-16 protein by ELISA.** Coated ELISA plates with increasing concentrations of mIL-16 were incubated with 2 µg/ml of Anti-mIL-16-mIgG1e3 mAb (red curve) or Anti-β-Gal-mIgG1e3 control antibody (grey curve) for 2 hours, followed by an HRP-conjugated anti-mouse secondary antibody (1/1000 dilution). Data are shown as optical density (OD) at 480 nm (mean + SEM).

## Absence of bacterial contamination in recombinant mIL-16

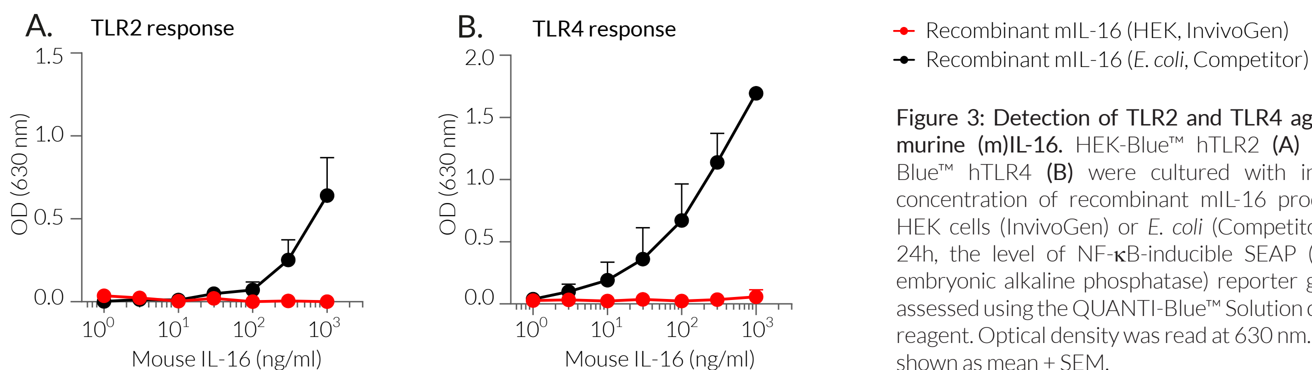


**Figure 3: Detection of TLR2 and TLR4 agonists in murine (m)IL-16.** HEK-Blue™ hTLR2 **(A)** or HEK-Blue™ hTLR4 **(B)** were cultured with increasing concentration of recombinant mIL-16 produced in HEK cells (InvivoGen) or *E. coli* (Competitor). After 24h, the level of NF-κB-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene was assessed using the QUANTI-Blue™ Solution detection reagent. Optical density was read at 630 nm. Data are 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