Validation data for recombinant human IL-16

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

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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 human 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 hIL-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

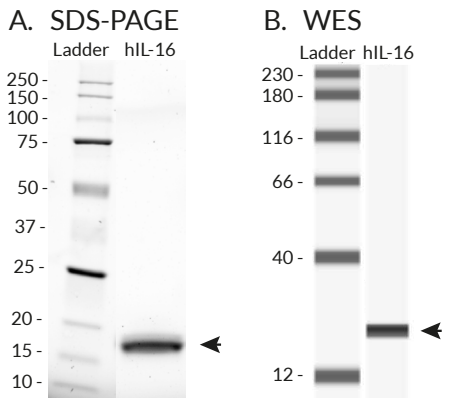

Figure 1: SDS PAGE and WES analysis of the recombinant human (h)IL-16 protein. (A) 0.5 µg of hIL-16 was loaded on a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions. A band was detected at ~17 kDa. **(B)** 4 µg of hIL-16 was analyzed by WES using InvivoGen's anti-hIL-16 hIgG1 antibody, followed by an HRP-conjugated anti-human secondary antibody. A band was detected at ~23 kDa.

Detection by ELISA

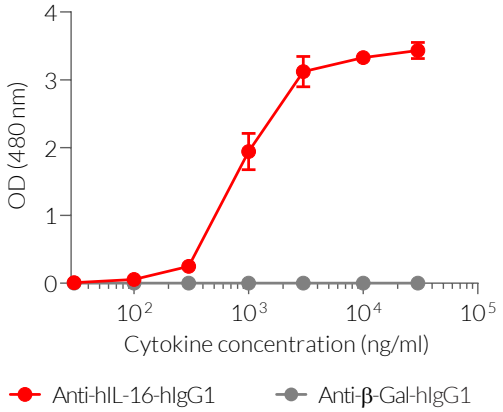

Figure 2: Detection of the recombinant human (h)IL-16 protein by ELISA. Coated ELISA plates with increasing concentrations of hIL-16 were incubated with 2 µg/ml of Anti-hIL-16-hIgG1 mAb (red curve) or Anti-β-Gal-hIgG1 control antibody (grey curve) for 2h, followed by an HRP-conjugated anti-human secondary antibody (1/1000 dilution). Data are shown as optical density (OD) at 480 nm (mean + SEM).

Absence of bacterial contamination in recombinant hIL-16

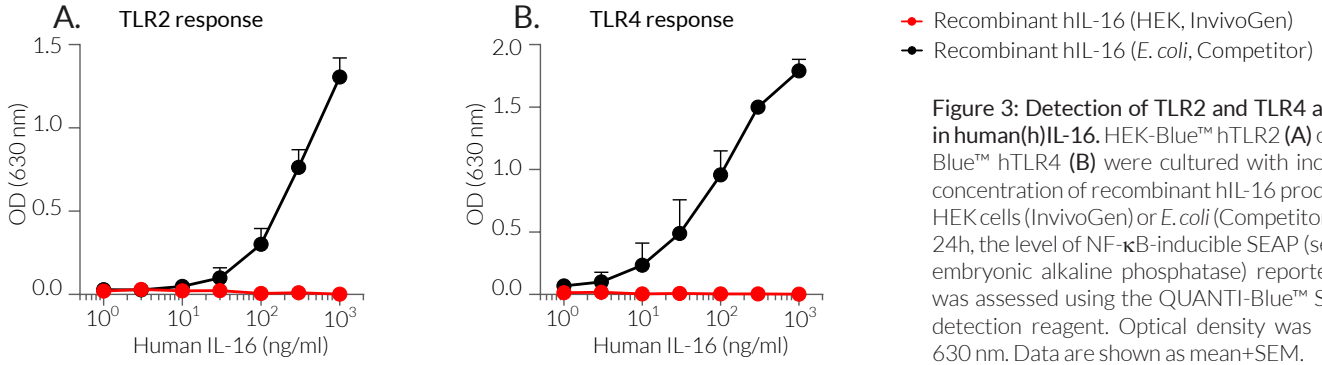

Figure 3: Detection of TLR2 and TLR4 agonists in human(h)IL-16. HEK-Blue™ hTLR2 **(A)** or HEK-Blue™ hTLR4 **(B)** were cultured with increasing concentration of recombinant hIL-16 produced in HEK cells (InvivoGen) or *E. coli* (Competitor). After 24h, the level of NF-κB-inducible SEAP (secreted embryonic 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.

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