Validation data for recombinant human IFN-α2b

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The interferon-alpha (IFN- α) family comprises 12 members playing a non-redundant role in anti-viral and anti-tumor immune responses. The size and purity of IFN- α 2b was assessed using SDS-PAGE (Figure 1). The biological activity of IFN- α 2b is confirmed using HEK-Blue^M IFN- α/β cells featuring an ISGF3-inducible SEAP reporter (Figure 2). Recombinant human IFN- α 2b can be used together with HEK-Blue^M IFN- α/β cells for the screening of inhibitory molecules, such as Anifrolumab, a therapeutic monoclonal antibody targeting the IFNAR1 subunit of the IFN- α receptor (Figure 3).

Human IFN- α 2b SDS-PAGE analysis

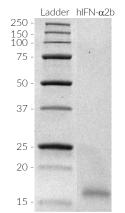
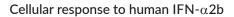


Figure 1. SDS-PAGE analysis of the recombinant human (h)IFN- α . 1 µg of recombinant human (h)IFN- α 2b wasloaded on a 12% Mini-PROTEAN® TGX Stain-Free^M Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions. The band is detected at ~17 kDa.



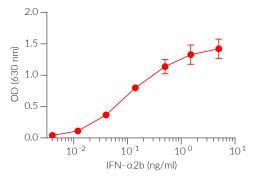
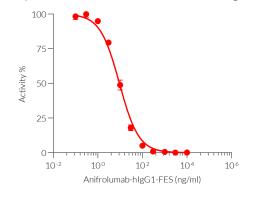


Figure 2. Dose-response of HEK-BlueTM IFN- α/β cells to recombinant human IFN- α 2b. Cells were stimulated with increasing concentrations of recombinant human (h)IFN- α 2b. After overnight incubation, the ISGF3-induced SEAP activity was determined using QUANTI-BlueTM, a SEAP detection reagent. Data is shown as optical density (OD) at 630 nm (mean ± SEM).



Dose-dependent neutralization of hIFN- α signaling

Figure 3. Anti-hIFNAR-hIgG1-FES is a potent neutralization antibody. HEK-BlueTM IFN- α/β cells were incubated with increasing concentrations of Anti-hIFNAR-hIgG1-FES (0.1 ng/ml - 10 µg/ml) for 1 h prior to the addition of recombinant human IFN- α 2b (100 pg/ml). After overnight incubation, SEAP activity in the cell culture supernatant was assessed using QUANTI-BlueTM Solution. Data are shown in percentage of activity (mean ± SEM).

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