Validation data for LumiKine™ Xpress hIFN-β 2.0

https://www.invivogen.com/lumikine-xpress-hifnb

For research use only

Version 19E14-ED

LumiKine™ Xpress hIFN-β 2.0 is a bioluminescent ELISA kit designed to rapidly quantify the levels of human interferon-β (hIFN-β) in cell culture supernatant, serum, and plasma samples. Expression of IFN-β is induced by a number of innate immune pathways including the cGAS-STING signaling pathway upon detection of cytosolic DNA. Unknown hIFN-β levels have been successfully quantified in cell supernatant, using LumiKine™ Xpress hIFN-β 2.0.

Determining unknown hIFN-β concentrations

A 7-point standard curve was generated using the standard hIFN-β provided in the LumiKine™ Xpress hIFN-β 2.0 kit (**Figure 1a**). From this, 'unknown' hIFN-β concentrations were determined upon stimulation of an engineered human monocyte cell line, THP1-Blue™ NF-κB (cat code #thp-nfkb), with 2'3' cGAMP, a natural STING agonist. hIFN-β was successfully detected (yellow) and quantified (blue) in the supernatant of stimulated cells upon activation of the STING signaling pathway, where as hIFN-β levels were 'not quantifiable' in the unstimulated samples (**Figure 1b**).

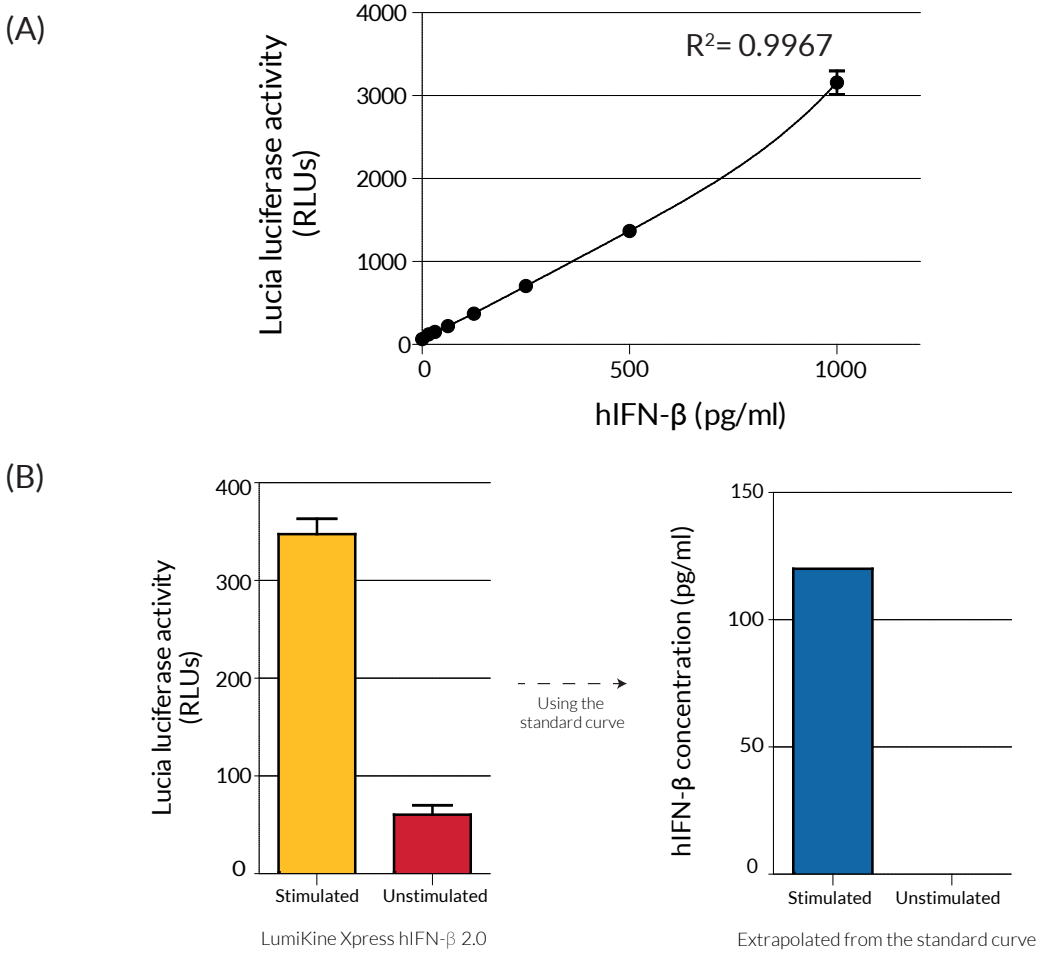

Figure 1: (A) A 7-point standard curve (beginning at 1000 pg/ml) was generated using a two-fold serial dilution of the provided hIFN-β standard. (B) THP1-Blue™ NF-κB cells (cultured in RPMI media) were either stimulated with 2'3' cGAMP (30 µg/ml), a STING agonist, or left unstimulated. After 24 hours, the supernatant was isolated and the concentration of hIFN-β in both samples was quantified using LumiKine™ Xpress hIFN-β 2.0.

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