Validation data for LumiKine™ Xpress mIFN-α 2.0

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

For research use only

Version 19E14-ED

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

Determining unknown mIFN-α concentrations

A 7-point standard curve was generated using the standard mIFN-α2 provided in the LumiKine™ Xpress mIFN-α 2.0 kit (**Figure 1a**). From this, 'unknown' mIFN-α concentrations in sera were determined for wild type (WT) and STING-knock out (KO-STING) mice injected with CL592 (cat code #tlrl-nacai), a synthetic STING agonist. mIFN-α was successfully detected (yellow) and quantified (blue) in the supernatant of WT samples upon activation of the STING signaling pathway, where as mIFN-α levels were 'not detectable' in the KO-STING samples (**Figure 1b**).

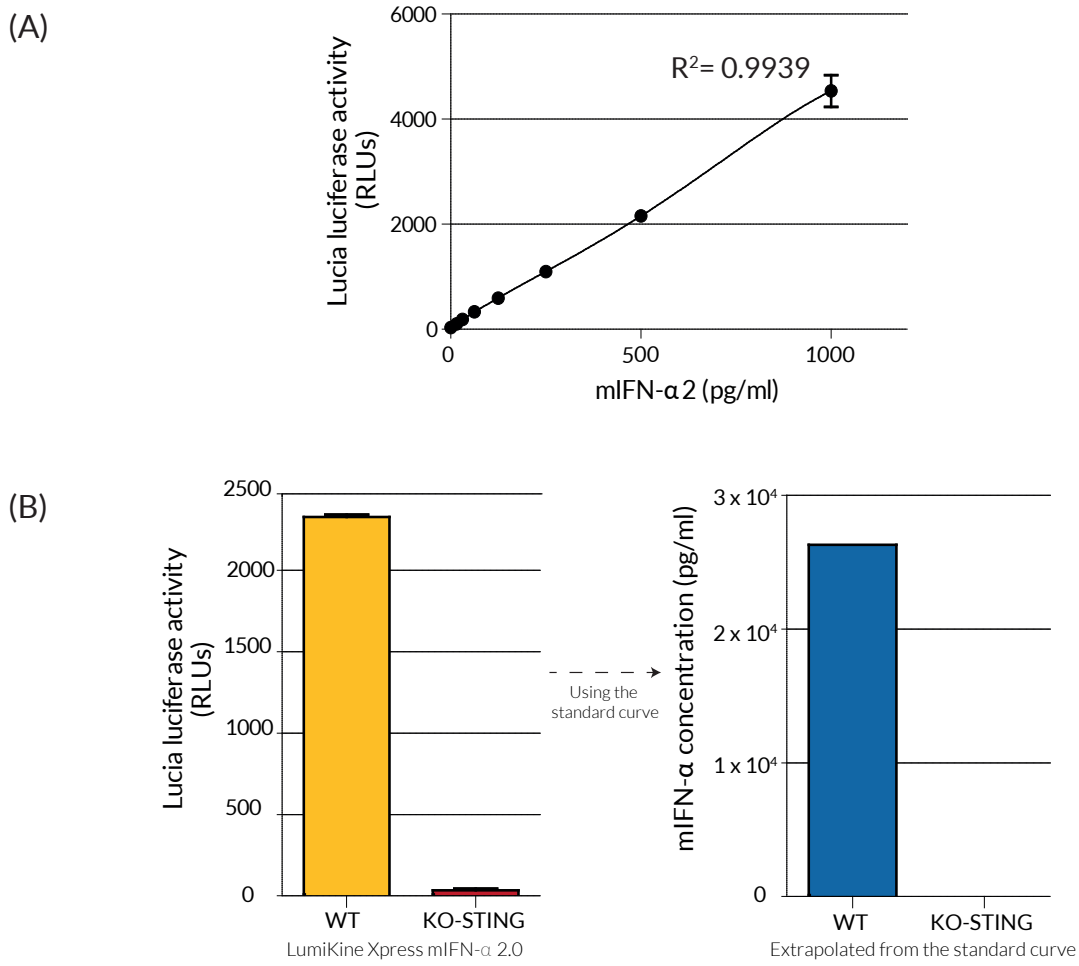

Figure 1: (A) A 7-point standard curve (beginning at 1000 pg/ml) was generated using a two-fold serial dilution of standard mIFN-α2. (B) Wild type (WT) and STING knock out (KO-STING) mice were injected intraperitoneally with CL592 (2 x 100 mg/kg), a STING agonist. After 4 hours, serum was isolated and diluted 1/50 using DMEM and 10% heat inactivated (HI)-FBS. The concentration of mIFN-α in both samples was quantified using LumiKine™ Xpress mIFN-α 2.0.

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