Validation data for Jurkat-Lucia™ NFAT Cells

https://www.invivogen.com/jurkat-lucia-nfat-cells

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Jurkat-Lucia™ NFAT cells were designed from a clone of the human T lymphocyte Jurkat cell line deficient for CD28 expression **(Figure 1)**. These cells stably express the Lucia luciferase reporter gene under the control of an ISG54 minimal promoter fused to six NFAT response elements. The activation of NFAT has been confirmed following the induction of Jurkat-Lucia™ NFAT cells with concanavalin A, phytohaemagglutinin P, or PMA/ionomycin **(Figure 2)**.

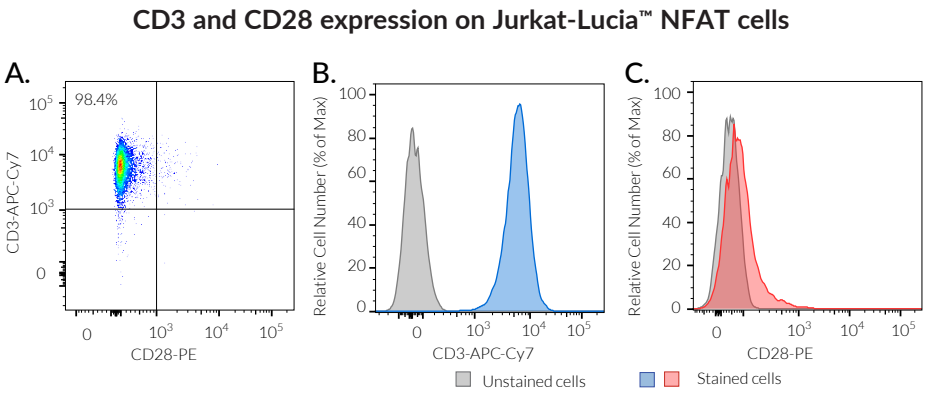

Figure 1: Validation of human CD3 expression and absence of CD28 expression by Jurkat-Lucia™ NFAT cells. Jurkat-Lucia™ NFAT cells were incubated with a cocktail of APC-Cy7-conjugated anti-hCD3 and PE-conjugated anti-hCD28 antibodies for 30 minutes. The binding affinty was then measured using flow-cytometry. **(A)** CD3 and CD28 co-staining. **(B)** CD3 and **(C)** CD28 expression compared to unstained cells.

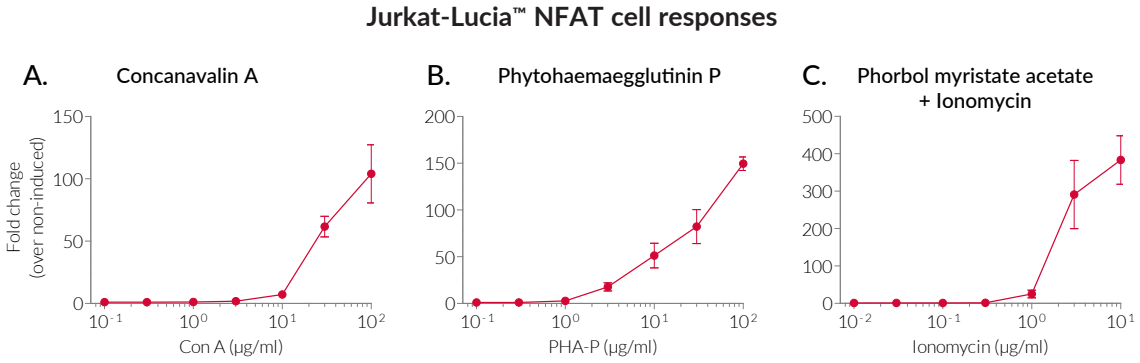

Figure 2: Validation of NFAT activation in Jurkat-Lucia™ NFAT cells.
Jurkat-Lucia™ NFAT cells were incubated with increasing concentrations of concanavilin A (Con A) **(A)**, phytohaemagglutinin P (PHA-P) **(B)**, or Ionomycin with 50 ng/ml phorbol myristate acetate (PMA) **(C)** for 24 hours. NFAT activation was assessed by determining Lucia luciferase activity in the supernatant using QUANTI-Luc™. Fold change over non-induced cells is shown.

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