Validation data for THP1-Null2 cells

https://www.invivogen.com/thp1-nullz

For research use only

Version 20F22-NJ

THP1-Null2 cells are derived from THP-1 human monocytic cells, the most commonly used model cell line for the study of inflammasome activation. Indeed, they express high levels of NLRP3, ASC and pro-caspase-1. These cells produce IL-1β upon stimulation with canonical or non-canonical inflammasome inducers, such as Nigericin, MSU crystals, Alum Hydroxide, Poly(dA:dT), and *E. coli* outer membrane vesicles (OMVs) **(Figure 1A)**. THP1-Null2 cells also exhibit a pyroptotic cell death upon inflammasome activation with inducers such as Nigericin **(Figure 1B)**.

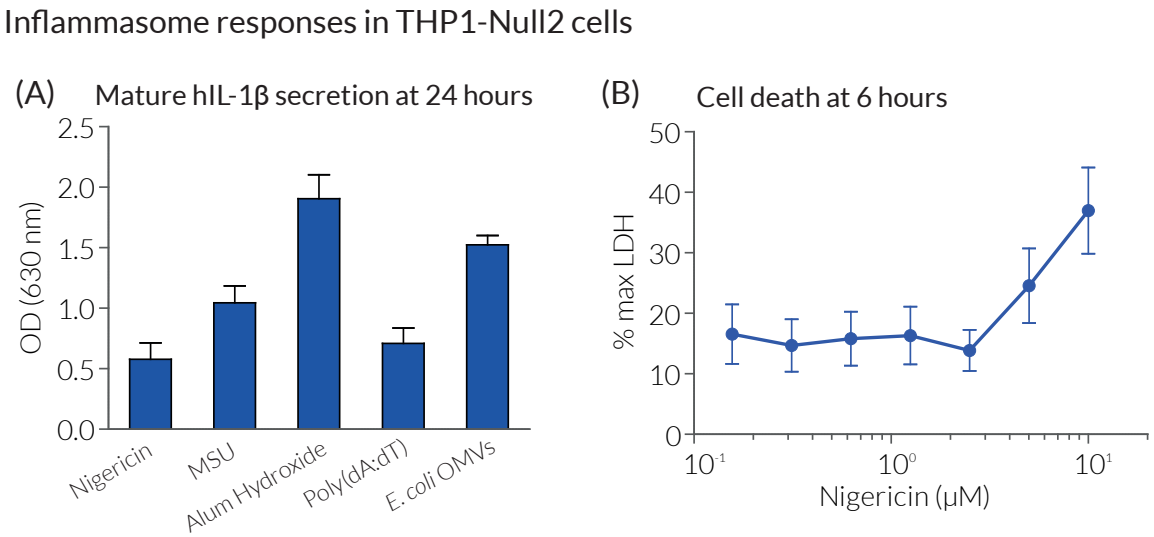

Figure 1: Mature IL-1β secretion and pyroptosis by THP1-Null2 cells upon inflammasome activation.
~3x10^5 THP1-Null2 cells were incubated for 3h at 37°C with LPS-EK (1 µg/ml) (*priming*) and then incubated (*activation*) with Nigericin (A: 5 µM; B: 0.15-10 µM), MSU crystals (MSU; 250 µg/ml), Alum Hydroxide (150 µg/ml), transfected Poly(dA:dT) (1 µg/ml), or *E. coli* outer membrane vesicles (OMVs) (100 µg/ml). After 24h, **(A)** the secretion of mature human (h)IL-1β was assessed in the culture supernatant using HEK-Blue™ IL-1β sensor cells which express an NF-κB SEAP reporter gene. QUANTI-Blue™ Solution was used to measure SEAP activity. Optical density (OD) was read at 630 nm. **(B)** After a 6 hour incubation with Nigericin, cell death was assessed using the lactate dehydrogenase (LDH) assay.

TECHNICAL SUPPORT
InvivoGen USA (Toll-Free): 888-457-5873
InvivoGen USA (International): +1 (858) 457-5873
InvivoGen Europe: +33 (0) 5-62-71-69-39
InvivoGen Hong Kong: +852 3-622-34-80
E-mail: info@invivogen.com