Validation data for HepG2-Lucia™ AhR Cells

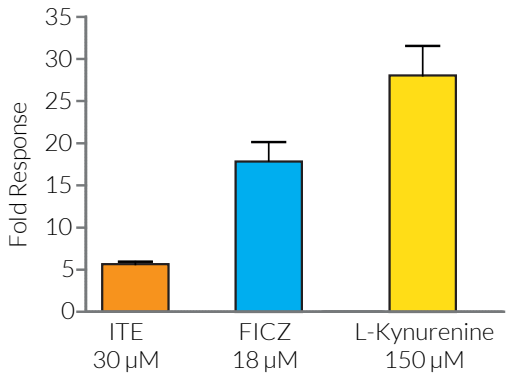
https://www.invivogen.com/hepg2-lucia-ahr

For research use only

Version 19C08-NJ

HepG2-Lucia™ AhR cells are engineered from the human HepG2 hepatoma cell line, which expresses endogenous aryl hydrocarbon receptor (AhR) and is of great interest for the detection/screening of AhR ligands in food or environmental samples. HepG2-Lucia™ AhR cells stably express the secreted Lucia luciferase reporter gene under the control of a minimal promoter coupled with the human Cyp1a1 gene entire regulatory sequence, which contains six DREs. The Lucia luciferase reporter protein is readily measurable in the cell culture supernatant by using QUANTI-Luc™. HepG2-Lucia™ AhR cells respond to xenobiotics such as TCDD. Additionally, these cells respond to tryptophan-derived compounds such as indole-3-acetic acid (IAA), 2-(1'H-indole-3'-carbonyl)-thiazole-4-carboxylic acid methyl esther (ITE), 6-formylindolo[3,2-b]carbazole (FICZ) and L-Kynurenine.
Of note, InvivoGen's AhR agonists do not induce activation of the interferon regulatory nor of the NF-κB transcription factors (as tested on our HepG2-Dual™ cells).

Evaluation of AhR-induced responses in HepG2-Lucia™ AhR cells



Induction of AhR activity by tryptophan byproducts in HepG2-Lucia™ AhR cells. The cells were incubated with 30 µM ITE, 18 µM FICZ, or 150 µM L-Kynurenine. After overnight incubation, the AhR activation was assessed by determining Lucia luciferase activity in the supernatant using QUANTI-Luc™. Data are expressed as fold responses as compared to non-induced cells.

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 3622-3480
E-mail: info@invivogen.com

InvivoGen
www.invivogen.com