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Analyzing cellular ATP levels

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Protocol status: Working

We use this protocol and it's working

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Abstract

Protocol for analysis of cellular ATP levels using the Promega Mitochondrial ToxGlo Kit.



Day 1

- 1 Seed cells into white opaque walled 96 well plates in  80 μ L of media/well, aiming for a confluency of ~80-90% the next day at the time of treatment. Fill all surrounding wells with water to prevent evaporation of the experimental samples. Make sure you seed a DMSO treatment control for each sample collection point.

Day 2

5m

- 2 Treat cells as desired in  80 μ L of media/well.
- 3 If analysing cells cultured in galactose media, change the media to galactose media 12 – 24 h prior to sample collection.
- 4 To analyse ATP levels, warm the 2x ATP detection reagent to  Room temperature , add  80 μ L of the 2x ATP detection reagent to each well using a multichannel pipette
- 5 Place the plate on a shaker block set to  Room temperature , cover the plate in foil, and incubate the plate shaking at  400 rpm for  00:05:00
- 6 Immediately take the plate to a plate reader that can read luminescence signal.

5m