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Resazurin cell viability assay in hiPSC-derived ineurons

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We use this protocol and it's working

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Abstract

This protocols describes the steps to follow in order to assess cell viability in hiPSC-derived ineurons cultured in 96-well plates via resazurin.

Resazurin preparation and addition to cells

1 A stock solution was prepared at a concentration of 10mg/ml by dissolving resazurin dye (7-hydroxy-3H-phenoxazin-3-one 10-oxide) in dH2O.

2 Day 14 ineurons were cultured in 200 µL culture media without antioxidants. Ferroptosis inducer treatments were performed for 24 hours.

3 To asses viability, 20 µL of the resazurin stock solution was directly added to the each well of a 96-well plate containing 200 µL of culture media (10% of cell culture volume per well – final concentration 100mg/ml) and plate was return to the 37 °C incubator for 02:00:00

Resazurin readout

4 Following the 2h resazurin incubation, samples were analyzed fluorometrically on a microplate reader (The SPARK® Multimode microplate reader, Ex = 540nM, Em = 600nM). Background signals obtained from cell-free wells were subtracted from each sample.

5 Cell viability under treatment conditions were reported as a percentage relative to untreated control cells.