

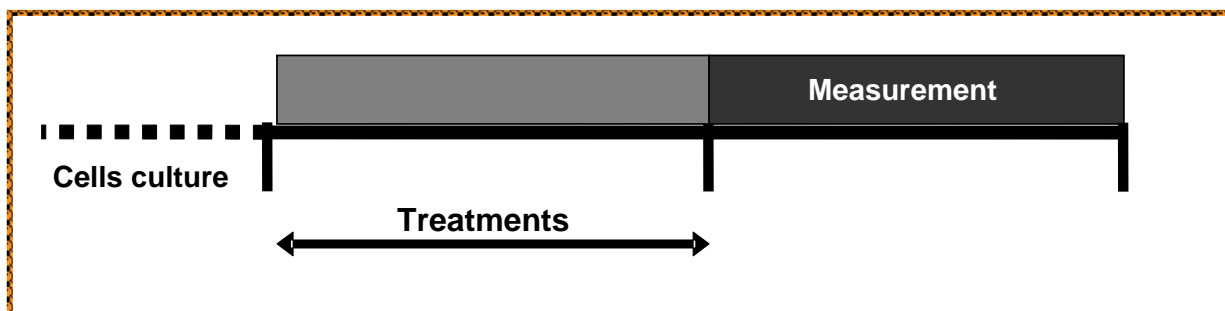
MITOCHONDRIAL INTEGRITY ASSAY

OUR MODEL

A cell based assay is performed to measure the loss of mitochondrial membrane potential on living cells* using a fluorescent probe that can predict the cell dysfunction prior to complete cell collapse.

To evaluate the mitochondrial membrane potential ($\Delta\Psi_m$), the TMRM fluorescent dye is used. The tested compounds are incubated with the cells and following the TMRM dye is added and measured in the automated fluorescent image platform (Cell Insight CX7 HCS Platform). The fluorescent signal of tested compounds is compared with the control samples.

* See our catalog of primary cells at www.innoprot.com and select the cell type you require.



RESULTS

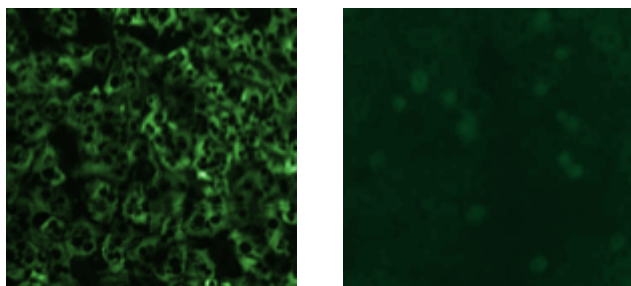


Figure 1. Mitochondrial membrane potential reduction in rat hepatocytes after staurosporine treatment. Rat hepatocytes were cultured under basal conditions (left) or treated with staurosporine (right, mitochondrial membrane potential loss control) 10 uM during 24 hours. The probe TMRM was added after the treatment and the mitochondrial membrane potential was detected as fluorescent signal.

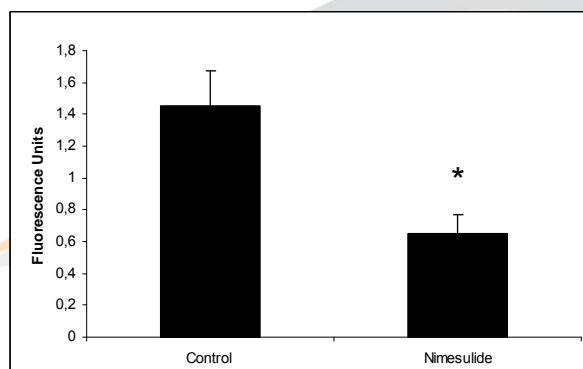


Figure 2. Nimesulide provokes statistically significant reduction of mitochondrial membrane potential ($\Delta\Psi_m$), respect to untreated control in rat hepatocytes cell dysfunction prior to complete cell collapse.