



PHENOVISTA

READY-2-GO CELL HEALTH ASSAY SERVICE

BACKGROUND

Cell viability and proliferation are critical pieces of information for assessing the safety and toxicity of drugs and therapeutic candidates in all disease indications. Depending on the disease of interest, drug-development campaigns may seek to enhance cell repopulation, as in degenerative diseases, or inhibit it, as in cancer. Evaluating the impacts of drug candidates on these metrics is required for moving therapeutic candidates into the clinic.

THE CHALLENGE

Pathways that lead to cell death are complex and can manifest as apoptosis or necrosis, which are two mechanistically and morphologically distinct processes that both contribute to the general measurement of cell viability, but distinguishing between these processes can prove challenging. Overlooking the toxic effects of drug candidates early can lead to investing resources into the attempted development of unsuccessful candidates.

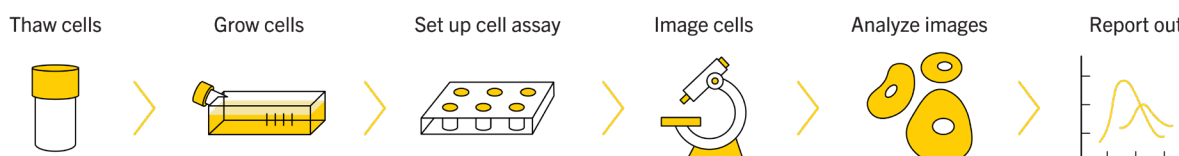
KEY FEATURES

- Multiplexed measurements of proliferation, apoptosis, and cell viability
- Only 4-6 weeks from assay to report
- Ability to bundle R2G assay services or transition to more complex, bespoke assay services with the same service provider

THE SOLUTION

Our Ready-2-Go Cell Health Assay Service provides multi-parameter assessments that quantitatively measure cell proliferation, apoptosis, and viability. The quick turnover time of this service gives you actionable data efficiently, and combining this assay with our Ready-2-Go Mitochondrial Health Assay Service provides a general toxicity framework of your drug candidates that can save you time and money in your drug-development campaign.

PROCESS OVERVIEW

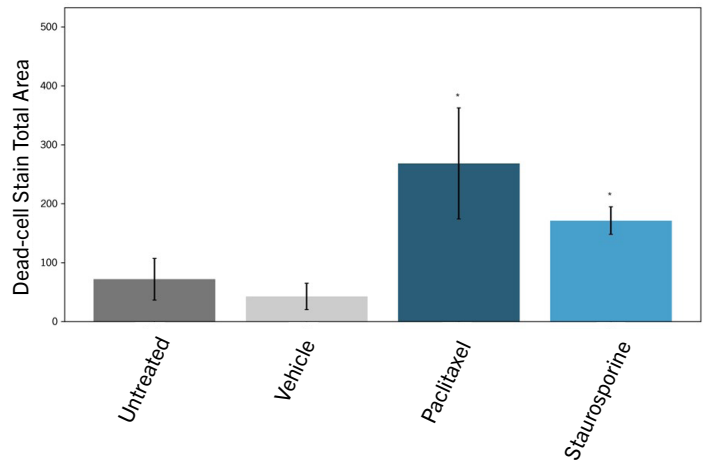
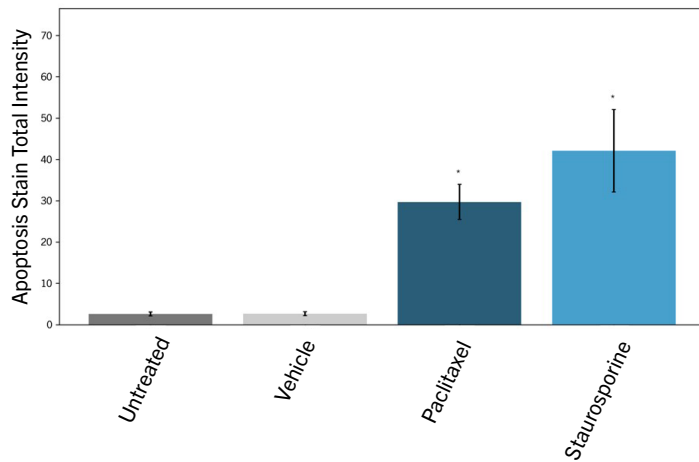
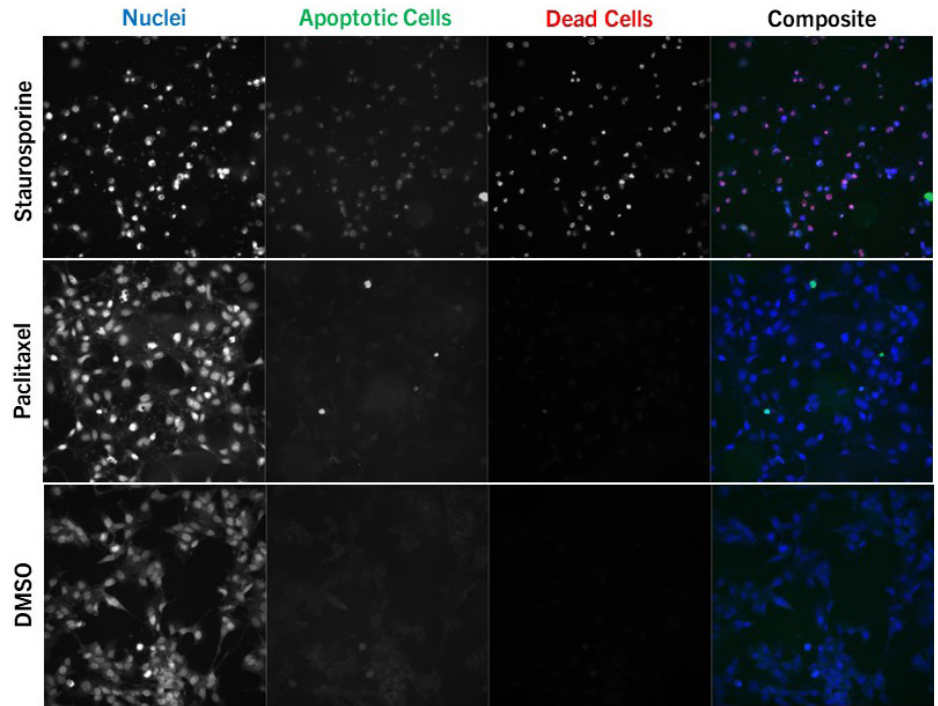


ASSAY OUTLINE

Cells are cultured and treated with reference compounds alongside your test articles. Cells are fixed and stained for imaging at various time points, and the images are analyzed and assessed for changes in cell proliferation and viability.

Representative Images: A549 cells after treatment with DMSO (vehicle), proliferation inhibitor paclitaxel, or toxicant staurosporine.

Quantitative analysis of images reveal static cell counts with paclitaxel treatment and increased levels of apoptosis and cell death with staurosporine and paclitaxel treatment. Statistical significance was calculated against vehicle.



| | Ready-2-Go Cell Health |
|-------------------|--|
| Cells | Choice of A549, U-2 OS, or Hep G2 cells |
| Markers | Nuclei, caspase-3/7 activity, nuclear permeabilization |
| Dosing | 6 doses of each of your test articles |
| Positive Controls | Paclitaxel, staurosporine |
| Negative Control | Vehicle(s) |

