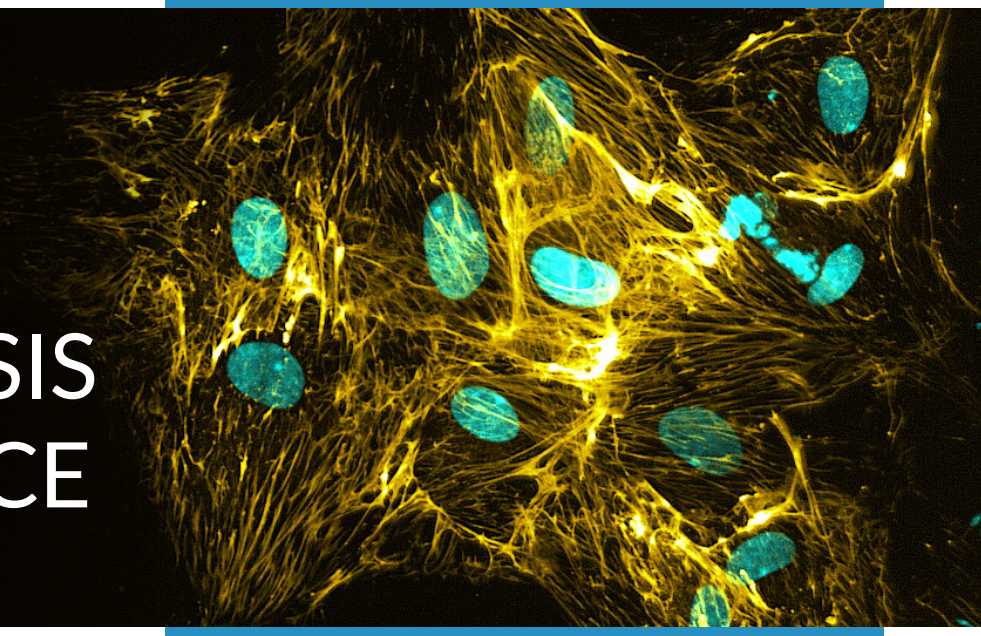
PHENOVISTA

READY-2-GO LIVER FIBROSIS ASSAY SERVICE



BACKGROUND

Acute liver injury is typically repaired, but when there is repeated or chronic injury (such as with alcohol abuse, hepatitis, and nonalcoholic fatty liver disease), the attempts at repair go awry, resulting in the disease fibrosis. Despite the increasing prevalence of liver fibrosis, there are still no effective treatments. Hepatic stellate cells (HSCs) are the major drivers of liver fibrosis, and emerging antifibrotic therapies aim to prevent/halt fibrotic induction in them.

KEY FEATURES

- Uses human, primary cells in an *in vitro* model of liver fibrosis
- Readouts that characterize intracellular & extracellular fibrosis indicators
- Only 6-8 weeks from assay to report
- Ability to bundle R2G assay services or transition to more complex, bespoke assay services with the same service provider

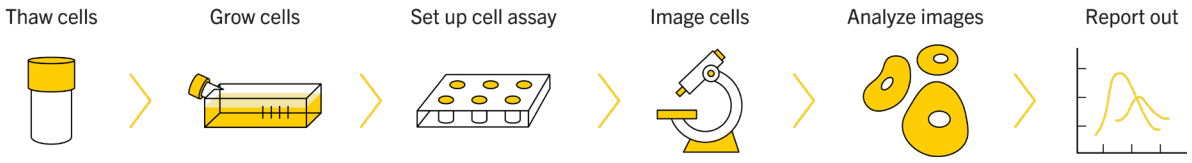
THE CHALLENGE

A reliable, physiologically relevant, and scalable model of liver fibrosis requires a large investment of time and resources. Animal models are commonly used but have greatly limited throughput, and the translational gap between animals and humans is wide. Cell-culture models often use immortalized cells that do not mirror clinical outcomes, and those that use primary cells require extensive validation and optimization of each lot.

THE SOLUTION

Our Ready-2-Go Liver Fibrosis Assay Service is scalable to high-throughput screens, uses physiologically relevant cells, and features validated conditions to get you actionable data quickly. We assess the effects of your test articles in an optimized model that uses primary, human HSCs, circumventing the animals-to-humans, translational gap to save you time and money in your drug-discovery efforts.

PROCESS OVERVIEW



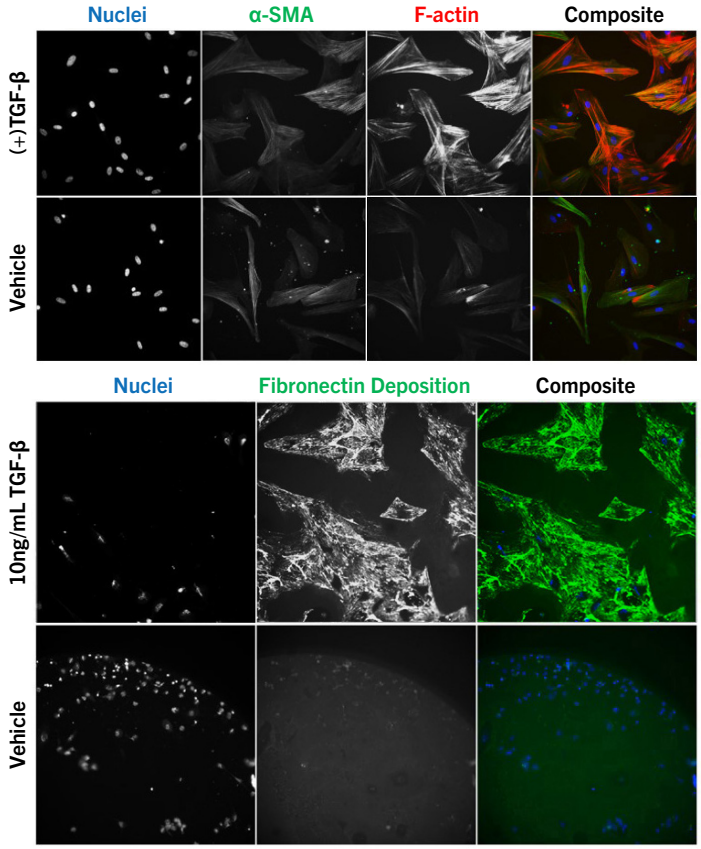
PHENOVISTA 6195 Cornerstone Ct E, #114 | San Diego, CA 92121 | info@phenovista.com | www.phenovista.com

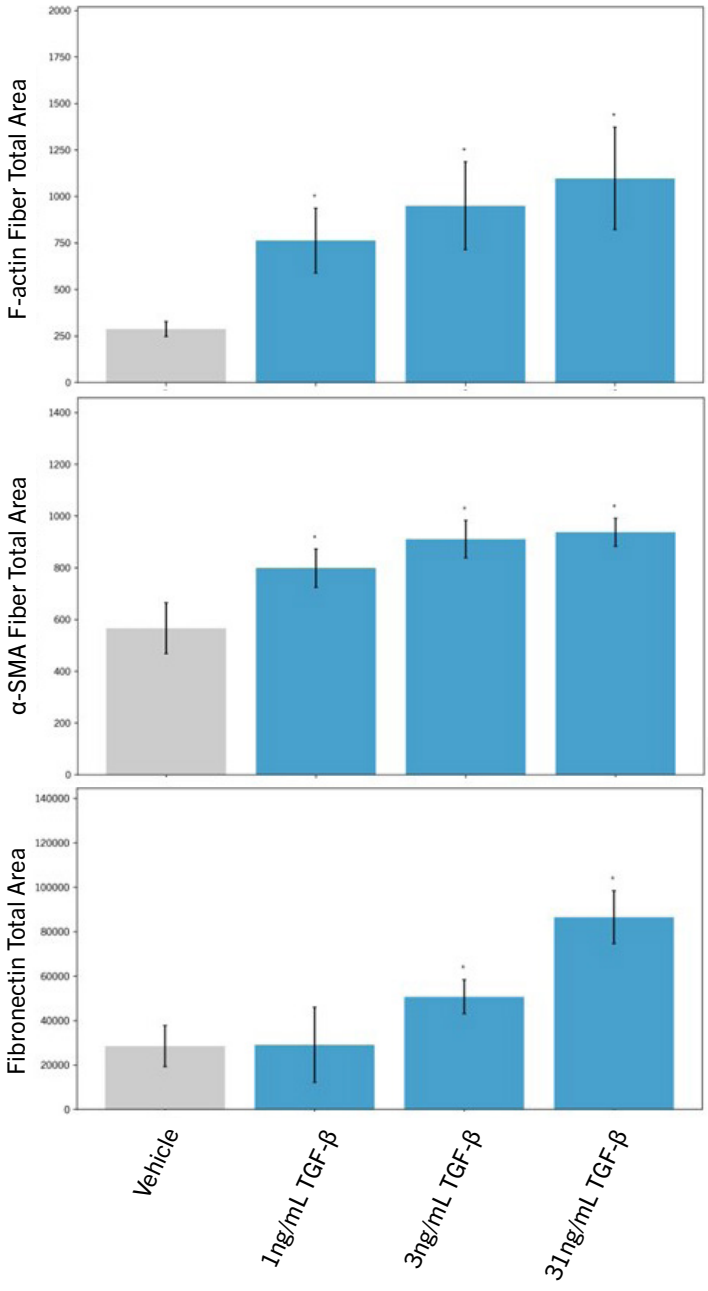
ASSAY OUTLINE

Primary, human hepatic stellate cells (HSCs) are cultured using a specialized protocol that limits the baseline induction of fibrosis. Cells are pre-treated with your test articles prior to fibrotic induction, and cells are fixed and stained for imaging and analysis at various time points.

Representative Images: HSCs after treatment with DMSO (vehicle) or TGF-β.

Quantitative analysis of images shows increased levels of F-actin filaments, α-SMA-containing stress fibers, and fibronectin deposition with TGF-β treatment. Statistical significance was calculated against vehicle.





	Ready-2-Go Liver Fibrosis
Cells	Primary, human hepatic stellate cells
Markers	Nuclei, F-actin, α-SMA, fibronectin (optional add-on)
Dosing	6 doses of each of your test articles
Positive Controls	TGF-β-only (fibrotic inducer); Alk5i (Galunisertib) (inhibitor of fibrotic induction)
Negative Control	Vehicle(s)