Compound testing services

IN MATRICO® Liver Fibrosis Assay

Fibrotic liver ECM is an integral component of liver fibrosis. Current liver fibrosis modeling and compound testing platforms do not incorporate liver ECM, and therefore lack a defining part of the fibrotic environment. Utilizing 3D human liver ECM technology, Xylyx Bio offers compound testing services IN MATRICO® for physiologically-relevant testing predictive of human disease biology.

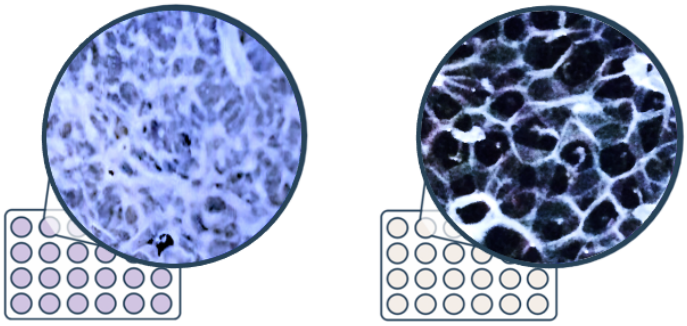
Advantages

- Recapitulates human liver fibrosis in vitro
- Utilizes primary human fibrotic liver ECM
- Compound testing in a disease-relevant environment
- Informed by relevant clinical pathology data

Human liver ECM platform for compound testing

Normal Liver ECM Scaffolds

Fibrotic Liver ECM Scaffolds



IN MATRICO® LIVER Fibrosis Assay plates

IN MATRICO® Liver Fibrosis Assay

Livery fibrosis assays utilizing 3D human liver TissueSpec® ECM technology for disease-relevant testing.

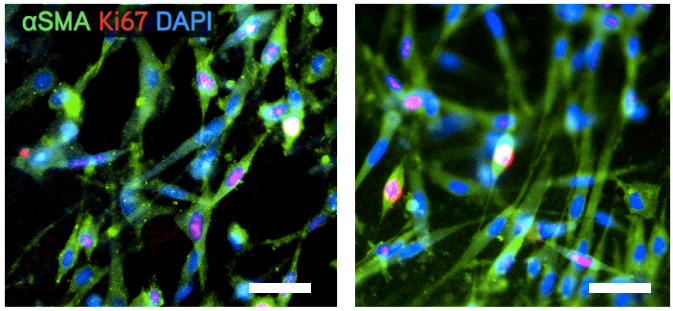
Standard offering includes 3 IN MATRICO® Fibrosis Assays:

- Viability
- Gene expression
- Protein secretion

Fibrotic phenotype of hepatic stellate cells in human liver ECMs

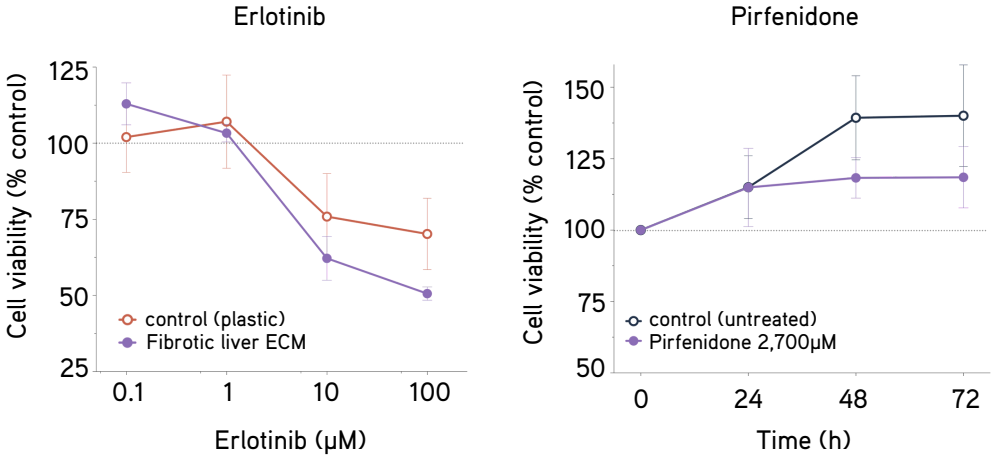
Normal Liver ECM

Fibrotic Liver ECM



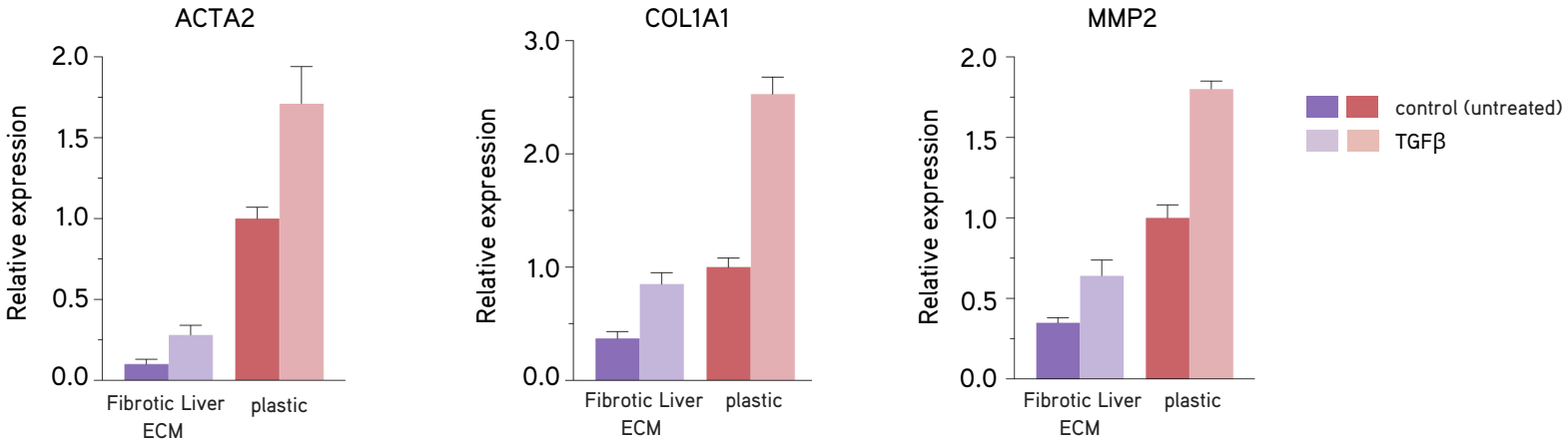
Fibrotic TissueSpec® Liver ECM supports fibrotic phenotype of activated primary hepatic stellate cells. Scale bar: 25 µm.

Viability assay



IN MATRICO® Liver Fibrosis Assay utilizing Fibrotic TissueSpec® Liver ECM enables predictive drug testing. Primary hepatic stellate cells in liver ECMs treated with reference compounds show concentration-dependent reduction in viability.

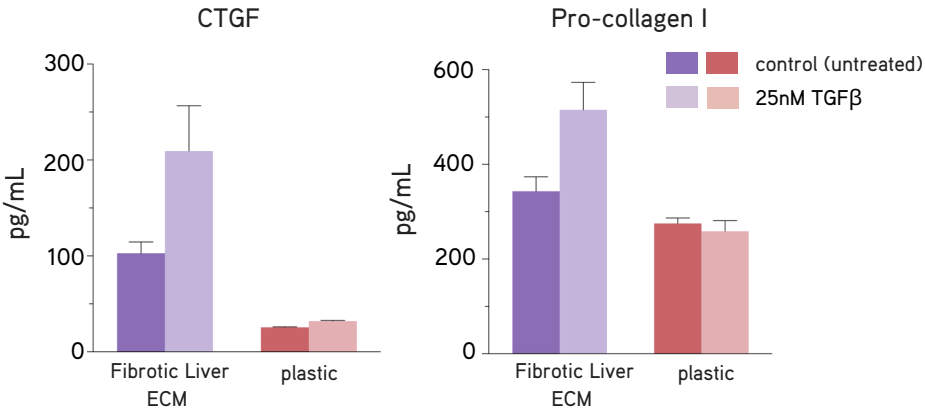
Gene expression assay



IN MATRICO® Liver Fibrosis Assay provides a human fibrotic liver ECM microenvironment. Changes in relative expression of fibrosis associated genes are consistent with expected response of primary hepatic stellate cells in Fibrotic Liver ECM, unlike in plastic.

Protein secretion assay

In Fibrotic Liver ECM, primary hepatic stellate cells show robust response to TGFβ in fibrosis associated secreted factors, such as CTGF and Pro-collagen I, consistent with fibrotic disease phenotype.



Custom assay development

Our assay services team will work closely with you to develop and implement a bespoke assay package customized to your research needs.

For partnering opportunities, contact us today at info@xylyxbio.com