

# IN MATRICO® HUMAN IPF PROTEIN SECRETION ASSAY

#### **ASSAY DESCRIPTION**

In Matrico® Human IPF Protein Secretion Assay is a clinically-relevant cell-based 3D assay integrating primary human lung fibroblasts and IPF decellularized ECM (dECM) from patients.

- contains IPF biochemical and mechanical signals
- validated with Pirfenidone and Nintedanib
- results consistent with IPF patient data

Human IPF dECM **ECM** type

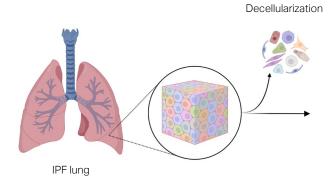
Cell type Human lung fibroblasts

Plate format 24-well **Endpoint** 72 hours

ProCol1, ProCol3, CTGF Markers analyzed

**Analytical method** ELISA (Supernatant)

#### **ASSAY SETUP**





IPF dECM



IPF fibroblasts

Drug candidate





In Matrico Human IPF assay plate

### **ASSAY WORKFLOW**

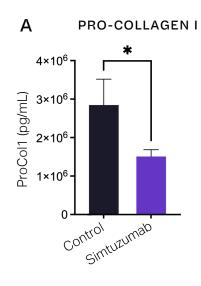
IPF dECM preparation Fibroblast seeding

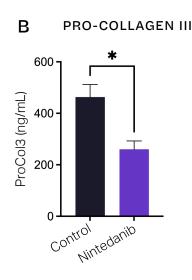
Drug treatment

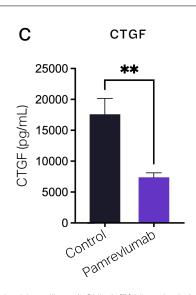
Sample collection

Assay readout

## **ASSAY VALIDATION**







Assay validation with antifibrotic drugs. (A) Simtuzumab (50μg/mL), a monoclonal antibody against lysyl oxidase-like 2 (LOXL2). (B) Nintedanib (1μΜ). (C) Pamrevlumab (100μg/mL), a monoclonal antibody against connective tissue growth factor (CTGF). \* p<0.05, \*\* p<0.01.