

Oris™ Pro Cell Invasion Assay

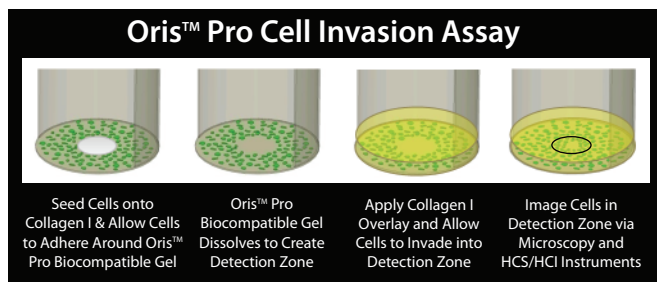
Accelerate Your Cell Invasion Research

Product Overview

Cell Invasion is measured *in vitro* by the ability of adherent cells to move through a 3-D extracellular matrix (ECM) that mimics an *in vivo* environment. The Oris™ Pro Collagen I Cell Invasion Assay offers a versatile method that allows for imaging and quantitating cells invading through a 3-D ECM in real-time. The Oris™ Pro Collagen I Cell Invasion Assay enables the use of automated liquid handling equipment for cell seeding and allows unlimited access to cells throughout the experiment.

Creating the Detection Zone

The Oris™ Pro Assay uses a non-toxic biocompatible gel (BCG) to form a cell-free zone on cell culture surfaces. Cells are seeded into the 96-well plate, and once the cells have attached and the BCG dissolved, a Collagen I Overlay is added to create a 3-D ECM environment for invasion.



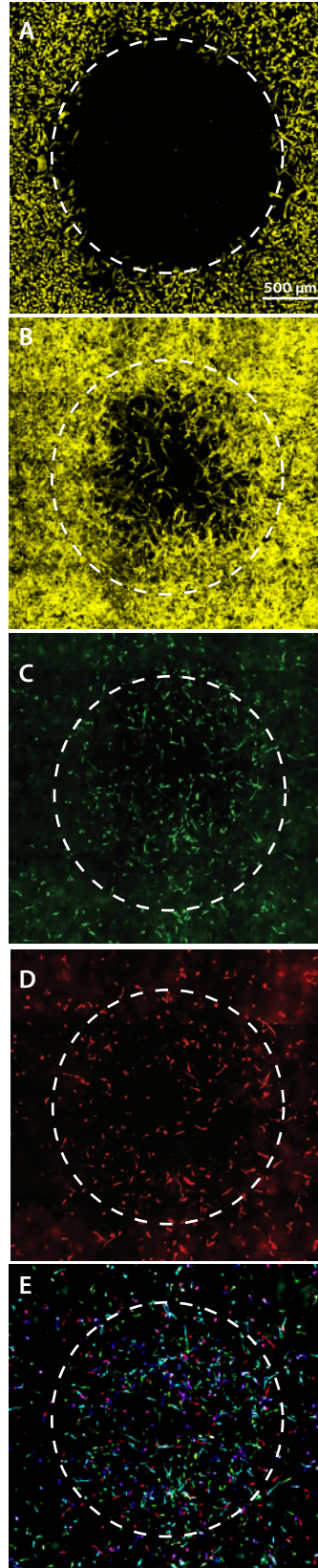
Measuring Cell Invasion

Cells can be treated with one or multiple stains or labels. The cells in the Detection Zone can be captured and quantified in real-time using microscopes and High Content Screening (HCS)/High Content Imaging (HCI) instruments. Z-stack analysis provides information about cell invasion above the plate surface. Staining live cells at the beginning of the experiment permits real-time images to be captured at any time point, while endpoint data can also be generated.

Materials Provided

Oris™ Pro Collagen I Coated, 96-well plate with BCG
 Oris™ Collagen I Overlay
 Oris™ 10X PBS Buffer

Representative Results



HT-1080's were seeded onto an Oris™ Pro Collagen I Cell Invasion Assay plate. After 1 hr incubation, media was removed and cells were overlaid with a 3 mg/mL Collagen I Overlay. Cells were allowed to invade for 72 hours, then fixed and stained for F-actin (TRITC-Phalloidin) and nuclei (DAPI). Images (A-E) were acquired using the BD Pathway™ 855 Bioimaging System. Images of pre-invasion (A) and invasion at 72 hr (B) are shown, in addition to images at Z-intervals of 60 μm (C) and 150 μm (D) into the Collagen I gel. A composite of Z-stacks at intervals of 60, 90, 120, and 150 μm obtained from a single well was created (E). Based on a Z-stack analysis of 8 wells, 416 cells \pm 38 invaded 60-150 μm into the Collagen I Overlay in the Detection Zone.

ORIS™ CELL-BASED ASSAYS

Accelerate Your Cell Motility Research

Product Listing

Product Name	Coating	Size	Detection Zone Format	Instrument Compatibility
Oris™ Pro Cell Migration Assays	Tissue Culture Treated	1-pack (PROCMA1) 5-pack (PROCMA5)	Biocompatible Gel	High Content Screening/Imaging Inverted Microscope
	Collagen I Coated	1-pack (PROCMA1C1) 5-pack (PROCMA1C5)		
Oris™ Pro Cell Invasion Assays	Collagen I Coated	1-pack (PROCIACC1) 2-pack (PROCIACC2)	Biocompatible Gel	High Content Screening/Imaging Inverted Microscope
Oris™ Cell Migration Assays	Tissue Culture Treated	1-pack (CMA1.101) 5-pack (CMA5.101)	Oris™ Cell Seeding Stoppers (pre-populated)	High Content Screening/Imaging Inverted Microscope Microplate Reader
	Collagen I Coated	1-pack (CMA1C1.101) 5-pack (CMA1C5.101)		
	Fibronectin Coated	1-pack (CMAFN1.101) 5-pack (CMAFN5.101)		
	TriCoated	1-pack (CMATR1.101) 5-pack (CMATR5.101)		
Oris™ Cell Migration Assembly Kits	Universal (Tissue Culture Treated)	1-pack (CMAU101) 5-pack (CMAU505)	Oris™ Cell Seeding Stoppers (not pre-populated)	High Content Screening/Imaging Inverted Microscope Microplate Reader
	Collagen I Coated	1-pack (CMAUCC1) 5-pack (CMAUCC5)		
	FLEX (Tissue Culture Treated)	4-pack (CMAUFL4)		
Oris™ Cell Invasion Assays	BME	1-pack (CIA101DE) 2-pack (CIA200DE)	Oris™ Cell Seeding Stoppers (not pre-populated)	High Content Screening/Imaging Inverted Microscope Microplate Reader
	Collagen I	1-pack (CIA101CC) 2-pack (CIA200CC)	Oris™ Cell Seeding Stoppers (pre-populated)	High Content Screening/Imaging Inverted Microscope Microplate Reader

HCS/HCI Compatibility

BD Pathway™ Bioimager

Cellomics ArrayScan® VTI HCS Reader

GE IN Cell Analyzer

Molecular Devices ImageXpress™ & Isocyte

PerkinElmer Opera™ & Operetta™

TTP LabTech Acumen® eX3

Platypus Technologies, LLC
5520 Nobel Drive, #100
Madison, WI 53711 USA
T: 608.237.1270
F: 608.237.1271
www.platypustech.com

