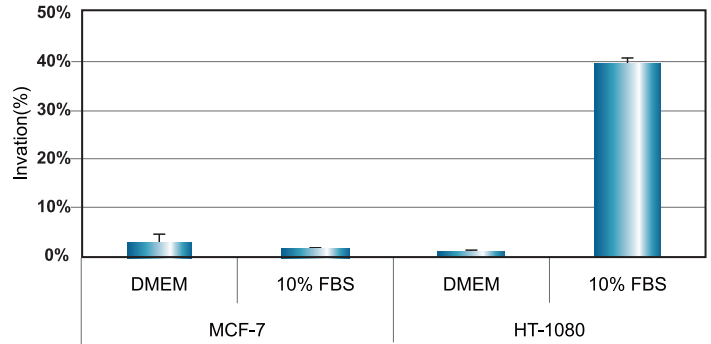
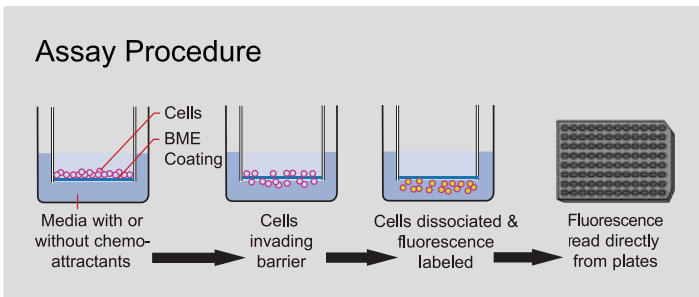


Cancer Cell Assays

Cell Invasion

Cultrex® Cell Invasion Assays accelerate the screening process for compounds that influence cell invasion through in vitro extracellular matrices. The assay has been functionally tested with MCF-7, HT-1080, NIH-3T3, and MDA-MB-231 cell lines.

Description	Size	Catalog No.
Cultrex 24 Well BME Cell Invasion Assay	24 Samples	3455-024-K
Cultrex 96 Well BME Cell Invasion Assay	96 Samples	3455-096-K



Quantitation of the ability of the human fibroblastic cell line, HT-1080, to cross a barrier consisting of an 8 micron polycarbonate filter occluded with Cultrex Basement Membrane Extract over a 24 hour period in response to 10% FBS. Samples were run in triplicate for both HT-1080 and the non-invasive MCF-7, mammary epithelial cell line.

Cell Migration

Trevigen's Cultrex® Cell Migration Assay utilizes a simplified Boyden chamber design with an 8 micron polyethylene terephthalate (PET) membrane.

Description	Size	Catalog No.
Cultrex 24 Well Cell Migration Assay	24 Samples	3465-024-K
Cultrex 96 Well Cell Migration Assay	96 Samples	3465-096-K

Tube Formation

The tube formation kit contains all the components necessary to perform the assay, including Growth Factor Reduced Basement Membrane Extract (BME), Calcein AM, Cell Staining Solution, and Sulforaphane.

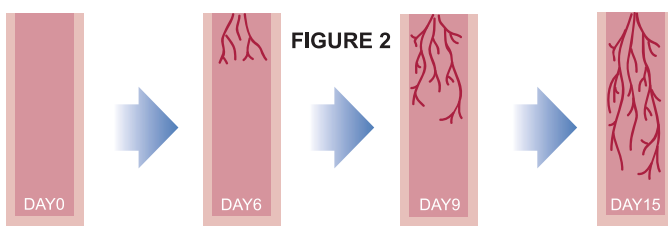
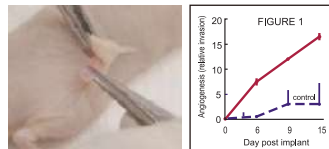
Description	Size	Detection	Catalog No.
Cultrex In Vitro Angiogenesis Assay Tube Formation Kit	96 Tests	Fluorometric/ Phase Contrast	3470-096-K

Note: Positive controls are available separately. Please refer to the Instructions for Use manual with kit.

In Vivo Angiogenesis Assay

DIVAA™ (Directed In Vivo Angiogenesis Assay)

The DIVAA kits provide implant grade silicone cylinders closed at one end, called angioreactors. The angioreactors are filled with 20 µl of Trevigen's Basement Membrane Extract (BME) pre-mixed with or without angiogenesis modulating factors.



Description	Size	Catalog No.
DIVAA Starter Kit	48 Angioreactors	3450-048-SK
DIVAA Activation Kit	48 Angioreactors	3450-048-K
DIVAA Inhibition Kit	48 Angioreactors	3450-048-IK
AngioRack™	1 Rack	3450-048-09

3D Kits & Matrices

PRODUCT NAME	CATALOG #	SIZE
Cultrex® 3-D Culture Matrix™ Reduced Growth Factor Basement Membrane Extract, PathClear®	3445-001-01	1 ml
	3445-005-01	5 ml
	3445-010-01	2 X 5 ml
Cultrex® Organoid Qualified Basement Membrane Extract (Type 2), PathClear®	3532-001-02	1 ml
	3532-005-02	5 ml
	3532-010-02	2x 5 ml
Cultrex® Organoid Qualified, Reduced Growth Factor Basement Membrane Extract (Type 2), PathClear®	3533-001-02	1 ml
	3533-005-02	5 ml
	3533-010-02	2 x 5 ml
Cultrex® 3-D Culture Matrix Laminin I	3446-005-01	30 mg
Cultrex® 3-D Culture Matrix Rat Collagen I	3447-020-01	20 ml
Cultrex® 3-D Spheroid Fluorometric Proliferation/Viability Assay	3510-096-K	96 samples
Cultrex® 3-D Spheroid Colorimetric Proliferation/Viability Assay	3511-096-K	96 samples
Calcein-AM Cell Viability Assay Kit	4892-010-K	1000 wells

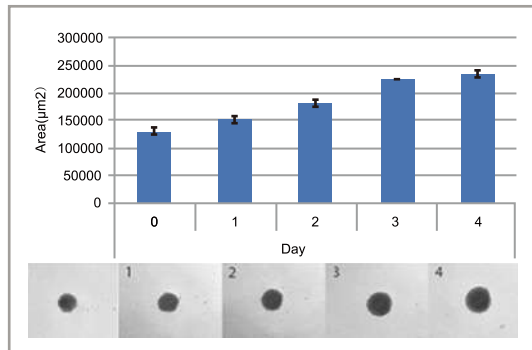
Organoids Harvest Buffer

for passing or biochemical analysis

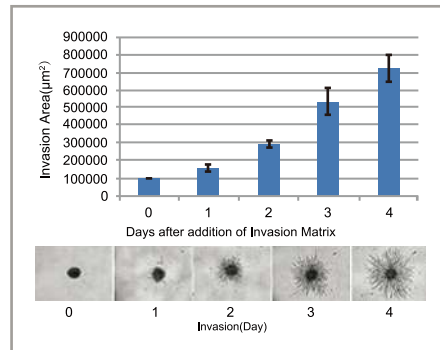
PRODUCT NAME	CATALOG #
Cultrex Organoid Harvesting Solution	#3700-100-01

3D Spheroid Assay

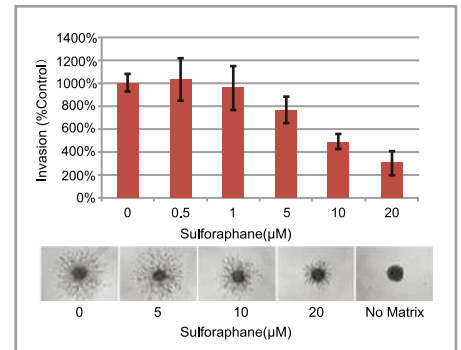
PRODUCT NAME	CATALOG #
Cultrex® 3-D Spheroid Cell Invasion Assay	3500-096-K
10×Speroid Formation Matrix and Plate	#3500-096-SP
10×Speroid Invasion Matrix and Plate	#3500-096-IP
10×Speroid Formation Matrix	#3500-096-01
10×Speroid Invasion Matrix	#3500-096-03



3-D culture proliferation of MDA-MB-231 breast cancer spheroids (using Cultrex 3-D Spheroid Proliferation/Viability Assay) time lapse expansion of MDA-MB-231 spheroids over a 96 hour period.



Spheroid invasion by MDA-MB-231 breast cancer spheroids over a 96 hour period.



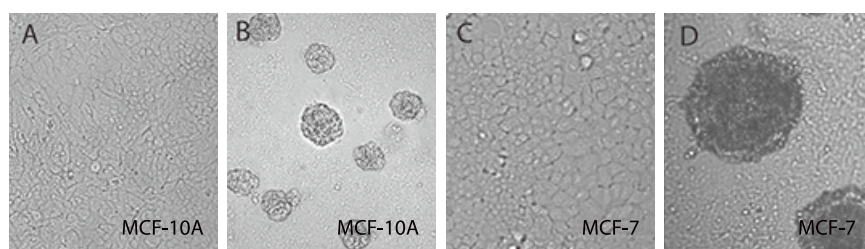
Inhibition of spheroid invasion by MDA-MB-231 breast cancer spheroids by Sulforaphane over a 96 hour period.

STEP	TIME
Resuspend cells Spheroid Formation ECM and add to 96 Well Spheroid Formation Plate	1~2 hour
Cells assemble into compact spheroids	3 days
Add Invasion Matrix and medium containing chemoattractants and or invasion modulating compounds	1~2 hour
Cell invade into the surrounding matrix in Response to chemoattractants	3-6 days

Total Time: 6-9 days

ImageJ analysis of spheroid invasion.

3-D Morphology



Morphology of MCF-10A normal mammary epithelial cells in traditional 2-D (A) and 3-D BME (B) cell culture and MCF-7 mammary adenocarcinoma cells in traditional 2-D (C) and 3-D BME (D) cell culture, scale = 250 µm.