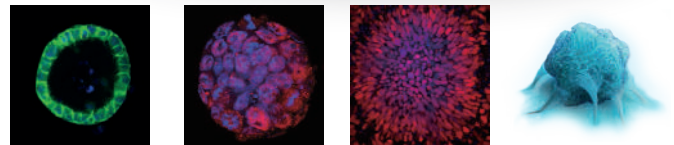
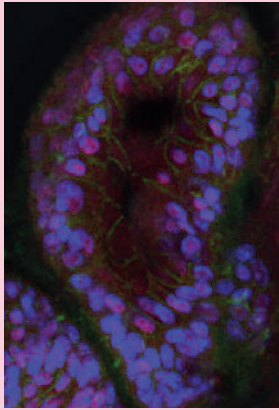


Upgrade Stem Cell & Organoid



Organoid Culture

R&D SYSTEMS
a biotechne brand



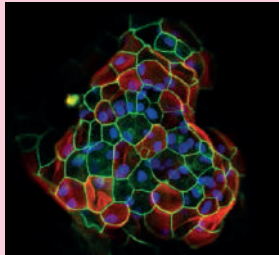
Cultrex® BME 2 RGF-Organoid Matrix

- Similar to Matrigel
- Gel at 37 °C
- Low Endotoxin(LPS) Conc: ≤1.5 EU/we
- Bigger Batches

<Reference Lab: Hans Clevers Lab>

Applications

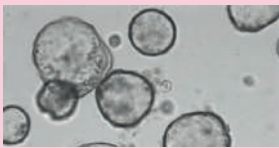
- 1) Organogenesis Models Drug Testing
- 2) Tumor / Disease Models Toxicity Screening
- 3) Personalized medicine Regenerative medicine
- 4) Organ Replacement



Cultrex Organoid harvesting Solution

Organoid로 harvest하자!

- for sub-culture
- for biochemical analysis
- non-enzymatic method



Vitrogel 3D hydrogel

- 신개념 3D culture hydrogel
- Room Temp Stable
- Cell harvest용이
- Injectable.



Cell harvesting



Injectable



Ready-to-use



Fast gelation



Transparent



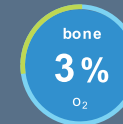
Permeable

The AVATAR™ Cell

In Vivo와 유사 환경
각 기관마다 다른 조건

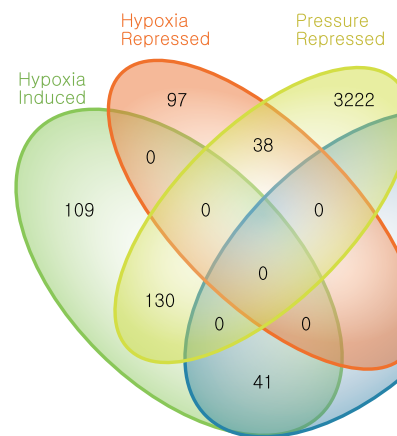
Oxygen

Pressure(psi)



- High Transfection Efficiency
- Rapid cell Expansion
- Easy cell Control: Differentiation/
- Improve your primary tumor culture

Cell Culture 혁신



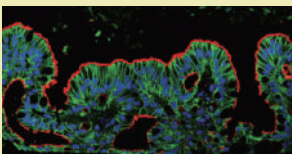
Venn diagram showing the number of induced and repressed transcripts in each RNA-seq transcriptome produced by iPSCs exposed to hypoxia, pressure, or

MimEX™ Technology

R&D SYSTEMS
a biotechne brand

Tissue model System

- Disease 모델 구현
- 약물독성, 흡수 및 신진대사 연구



현재 가능 모델
MimEX GI

Coming Soon 모델

- Skin
- Liver
- Kidney
- pancreas
- Lung
- Prostate
- Ovary



일반 Incubator와

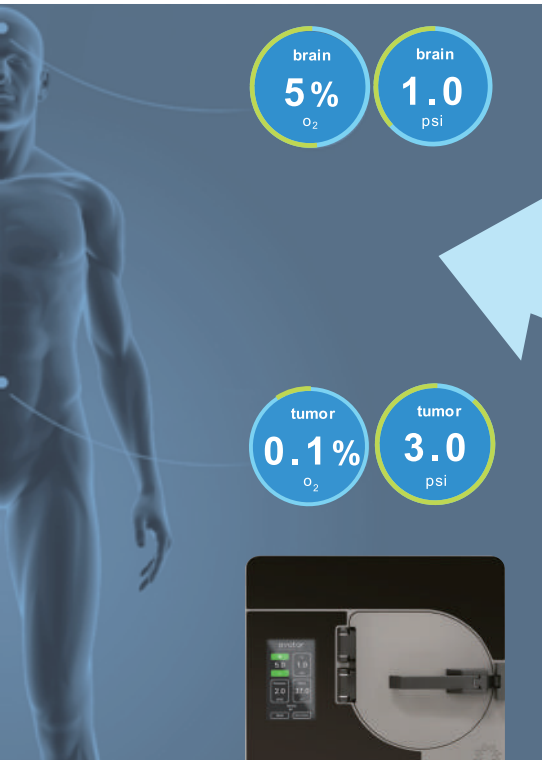
다른 Gene expression

양상을 확인하실 수 있습니다

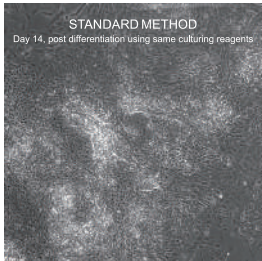
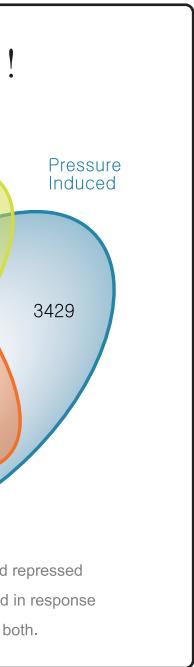


- Xeno-free
- Optimize
- AVATAR와 가장 효과적!!

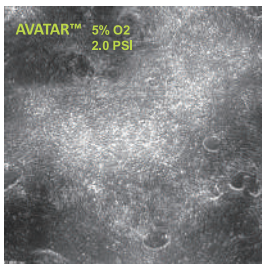
Control System



Stemness
re



VS.



Cardiomyocyte
분화비교 동영상

Stem Cell Culture

R&D SYSTEMS
a biotechnie brand

Proteins

- Most referenced
- Bioactive
- Pure
- Low endotoxin level
- GMP grade 가능

Small molecules

- High purity
- Highly Cited Products
- 믿을 수 있는 QC
- GMP 가능



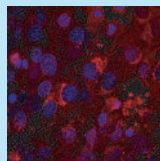
StemXVivo®

- 효율적인 Stem Cell 분화에 최적화 된 Media & Supplement
- 분화 실험 시 발생할 수 있는 Validation 최소화
- 손쉬운 Protocol + 높은 재현성
- 검증된 Protocol로 Cost & Time Saving

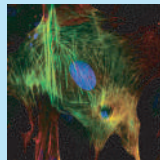


Differentiation Kit for ES/iPS

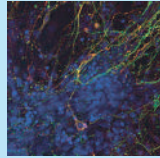
- h Ectoderm
- h Mesoderm
- h Endoderm
- m Oligodendrocyte
- h/m Dopaminergic Neuron
- h Neural Progenitor
- h Cardiomyocyte
- h Hepatocyte
- h Neural Progenitor



StemXVivo
Osteogenesis Induction
Media and Supplements



StemXVivo
Cardiomyocyte Kit



StemXVivo
Dopaminergic neuron
Differentiation Kit

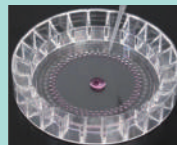
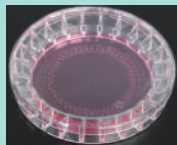
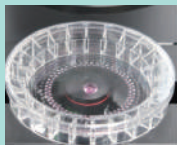
Media & Supplement for MSC

- h/m/r Osteogenic/Adipogenic Base Media
- h/m/r Chondrogenic Base Media
- h/m/r Osteogenic Supplement
- h/m/r Adipogenic Supplement
- h/m Chondrogenic Supplement
- r Chondrogenic Supplement

Singel Cell Study

iBiochips

쉽고 빠른 Single cell isolation / No instrument repaired



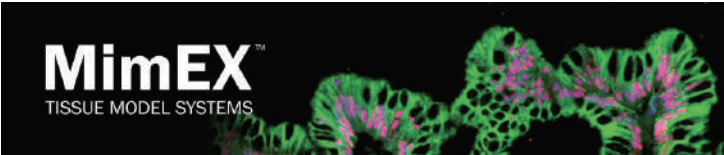
Operation 동영상 1



Operation 동영상 2

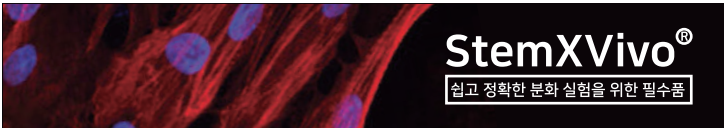
Order Information

For Organoid Culture		
Cat #	Description	Size
3533-001-02	Cultrex PathClear Reduced Growth Factor BME, Type 2	1mL
3533-005-02		5mL
3533-010-02		2 X5mL
3433-001-R1	Cultrex Reduced Growth Factor Basement Membrane, Type R1	1mL
3433-005-R1		5mL
3433-010-R1		2 X5mL
3700-100-01	Cultrex Organoid Harvesting Solution	100mL



For Tissue Model System	
Description	Size
MimEX Tissue Processing Kit	1 Kit
MimEX GI Starter Kit	1 Kit
MimEX GI Expansion Media	250mL
MimEX GI Differentiation Media	100mL
MimEX Irradiated Fibroblast Kit	1 Kit

For Stem Cell Culture				
Description	GMP	Cat #		
		Human	Mouse	Rat
Activin A	338-GMP	338-AC	338-AC	338-AC
BMP-2	355-GMP	355-BM	355-BM	355-BM
BMP-4	314-GMP	314-BP	5020-BP	
Dkk-1	5439-GMP	5439-DK	5897-DK	4010-DK
EGF	236-GMP	236-EG	2028-EG	3214-EG
FGF-basic	233-GMP	233-FB	3139-FB	3339-FB
Flt-3 Ligand	308-GMP	308-FK	427-FL	
HGF	294-GMP	294-HG	2207-HG	
IGF-1	291-GMP	291-G1	791-MG	4326-RG
IL-3	203-GMP	203-IL	403-ML	2524-RL
IL-6	206-GMP	7270-IL	406-ML	506-RL
KGf/FGF-7	251-GMP	251-KG	5028-KG	
Noggin	6057-GMP	6057-NG	1967-NG	
PDGF-BB	220-GMP	220-BB		520-BB
SCF/c-kit Ligand	255-GMP	255-SC	455-MC	6998-SC
Sonic Hedgehog(C24II)N-terminus	1845-GMP	1845-SH	464-SH	
Sonic Hedgehog N-terminus	1314-GMP	1314-SH	461-SH	
TGF-b1	240-GMP	7754-BH	7666-BH	
TGF-b3	243-GMP	8420-B3		
VEGF	293-GMP	293-VE	493-MV	564-RV
Wnt-3a	5036-GMP	5036-WN	1324-WNP	



For AVATAR Cell Control System		
Cat #	Description	Size
1981002	Avatar Duo	2 Module
1981003	Avatar AD	4 Module
1981004	Avatar HT	6 Module HT
2001002	XcellIR8-b KIT (6 to 10 tumor samples)	
3001001	XCM Plate 12-Pack (6 to 10 tumor samples)	
2001003	Dissoci8 KIT (6 to 10 tumor samples)	
2001004	Dissoci8 PLUS KIT (6 to 10 tumor samples)	
2001005	Tumor Xport Buffer (6 to 10 tumor samples)	

For Single Cell Isolation		
Cat #	Description	Size
H1-SA-1PK	Smart Aliquoter, 1pack	1pack
H1-SA-5PK	Smart Aliquoter, 5pack	5pack

GMP Small Molecules for stem cell	
Reprogramming Adult (Somatic) Cells to iPSCs	
CHIR99021 (GSK-3 Inhibitor)	SB431542 (TGF-beta 1 and ALK4/7 Inhibitor)
Stem Cell Proliferation and Maintenance	
Y-27632 (ROCK Inhibitor)	
Differentiation of iPSCs	
CHIR99021 (GSK-3 Inhibitor)	SB431542 (TGF-beta 1 and ALK4/7 Inhibitor)
DAPT (γ-secretase inhibitor)	XAV939 (Tankyrase Inhibitor)

StemXvivo for stem cell		
Name	Description	Cat#
Culture Media		
StemXVivo MSC Expansion Media	<ul style="list-style-type: none">Cell Type Specific MediaStem cell에 최적화된 Media & SupplementR&D의 Good Quality Products 이용Ready to Use	CCM004
StemXVivo MSC Serum-Free Expansion Media		CCM014
N-2 MAX Media Supplement		AR009
N-2 Plus Media Supplement		AR003
N-21 MAX Insulin Free Media Supplement		AR010
N-21 MAX Vitamin A free Media Supplement		AR012
Identification Kits		
hMSC Functional Identification Kit	<ul style="list-style-type: none">Stem cell의 Pluripotency를 한 번에 확인 !	SC006
hPluripotent SC Functional Identification Kit	<ul style="list-style-type: none">실험 간의 variation 최소화	SC027B
h/m/r Neural Lineage Functional Identification Kit	<ul style="list-style-type: none">분화 여부를 확인 할 수 있는 High Quality Ab 제공	SC028
Differentiation Kits		
StemXVivo Ectoderm Kit	<ul style="list-style-type: none">완벽히 optimization 된 Kit실험 간의 variation 최소화R&D의 Good Quality Proteins 제공Differentiation 하기 위한 Ab 제공간단하고 손쉬운 Protocol	SC031B
StemXVivo Mesoderm Kit		SC030B
StemXVivo Endoderm Kit		SC019B
h/m Dopaminergic Neuron Differentiation Kit		SC001B
m Oligodendrocyte Differentiation Kit		SC004
StemXVivo Neural Progenitor Differentiation Kit		SC035
StemXVivo Cardiomyocyte Differentiation Kit		SC032B
StemXVivo Hepatocyte Differentiation Kit		SC033