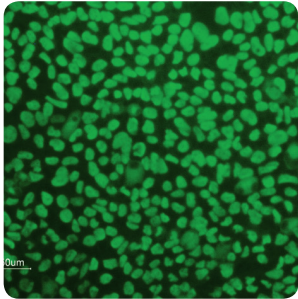




미분화 human ESC/iPSC 배양에 최적화된 culture system
DEF-CS™ 500 (Code Y30010)



Human pluripotent stem cells remain undifferentiated when cultured in DEF-CS over time. Human iPSCs cultured for 23 passages in DEF-CS characterised by Oct-4 staining.

DEF-CS 500은 human pluripotent stem cell을 feeder-free 상태에서 효과적으로 증식시킬 수 있는 최적의 배양 시스템이다. Background 없이 완벽한 미분화상태로 배양이 가능하므로 cell-selection이 불필요하며, single cell 상태로 enzymatic passaging이 가능하므로, high throughput screening, transfection, scaffold seeding 등의 다양한 적용이 가능하다.

- **Culture system** : additives와 coating compound 포함
- **Single cell passaging** : 일반적인 mechanical passaging의 불편함 제거
- **Single cell applications** : transfection, reprogramming에 유리
- **Efficient expansion** : Robust system with high reproducibility
- **No cell selection is needed** : virtually no background differentiation

Application

- Scale up and mass production of human pluripotent stem cells
- Bioreactor
- Transfection and reprogramming
- Single cell seeding for high throughput screening
- Seeding in scaffolds (Tissue engineering, maturation of human pluripotent stem cells towards tissue-like structures)

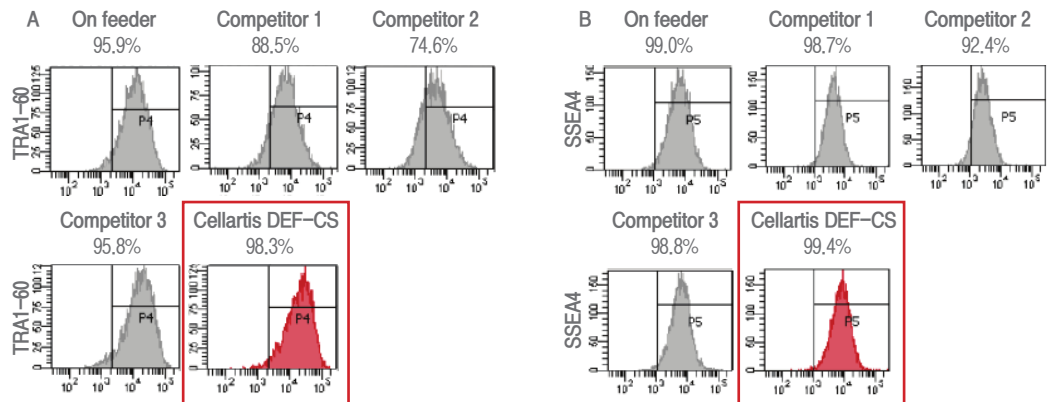


Figure 1. Pluripotency of cells grown for 5 weeks in DEF-CS stem cell culture media as compared to other available culture systems. DEF-CS revealed the highest proportion and intensity of TRA1-60 (A), and SSEA4 (B).

■ **Coating reagent까지 포함된 culture system**

DEF-CS 500 구성품 (Code Y30010)

DEF-CS Basal medium	500 ml	
DEF-CS COAT-1	4 ml	Plate coating 용
DEF-CS GF-1	750 µl x 2	
DEF-CS GF-2	500 µl	Supplement
DEF-CS GF-3	200 µl	



Stem Cell Culture Media 선택가이드



줄기세포를 미분화 상태로 유지하거나, 효과적으로 분화를 유도하도록 조절하는 것은 매우 중요한 과정이다. Cellartis는 배아줄기세포 (embryonic stem cell, ESC), 유도만능줄기세포(induced pluripotent stem cell, iPSC), 배아생식세포 (embryonic germ, EG), 신경줄기세포(neural stem cell, NSC) 배양 시 최적화된 유도, 유지, 확대배양에 적합한 배지와 supplement를 제공한다.

1. Maintenance media : serum-free 시스템으로 ESC, EG, iPSC 배양에 최적

Code	Product	Species	Cell type	Culture matrix	Feeder Free, defined	비고
Y30010	DEF-CS 500	Human	iPS, ES	포함	O	
Y40020	GS1-R	Rat	ES, EG	X		
Y40030	GS2-M	Human, Mouse	ES, iPS	X	O	
Y40010	iSTEM	Mouse	ES	X	O	

2. Differentiation media : ES, NS 세포의 분화를 유도하는 배지

Code	Product	Species	Cell type	Details
Y40002	NDiff 227	Mouse	ES	Neural differentiation; contains N2 and B-27
Y40001	RHB-A	Human, Mouse	NS	Propagation and cell-type specific differentiation; contains growth factors
Y40000	RHB-Basal	Human, Mouse	NS	Basal formulation of RHB-A; does not contain growth factors or neuronal supplements

항체 선택가이드 - Stem Cell & Differentiated Cell Marker

구분	Code	Products	Cell type	Species Reactivity	Application method
분화된 cell marker	Y40400	STEM101	Nuclear protein expressed in a variety of human tissues, including brain	Human	IHC, IF
	Y40410	STEM121	Cytoplasmic protein expressed in a variety of tissues including brain, liver, and pancreas	Human	IHC, IF
	Y40420	STEM123	Glial fibrillary acidic protein (GFAP)	Human	IHC, IF
	Y20012	hFF-Collect	Human fibroblasts	Human	IC, IF
Pluripotent cell marker	Y20010	hES-Collect	Human ES 세포와 human iPS 세포의 표면 항원 인식	Human	IC, IF
	Y20011	ES-Collect		Human, Mouse	IC, IF
	M221	Anti-Human Oct4, Monoclonal	Oct 4	Human	WB, IC
	M223	Anti-Human Sox2, Monoclonal	Sox 2	Human	WB, IC
	M222	Anti-Human Lin28, Monoclonal	Lin 28	Human	WB, IC

[용어설명]

ES : embryonic stem, EG : embryonic germ, iPS : induced pluripotent stem, NS : neural stem
IHC : immunohistochemistry, IC : immunocytochemistry, WB : western blot