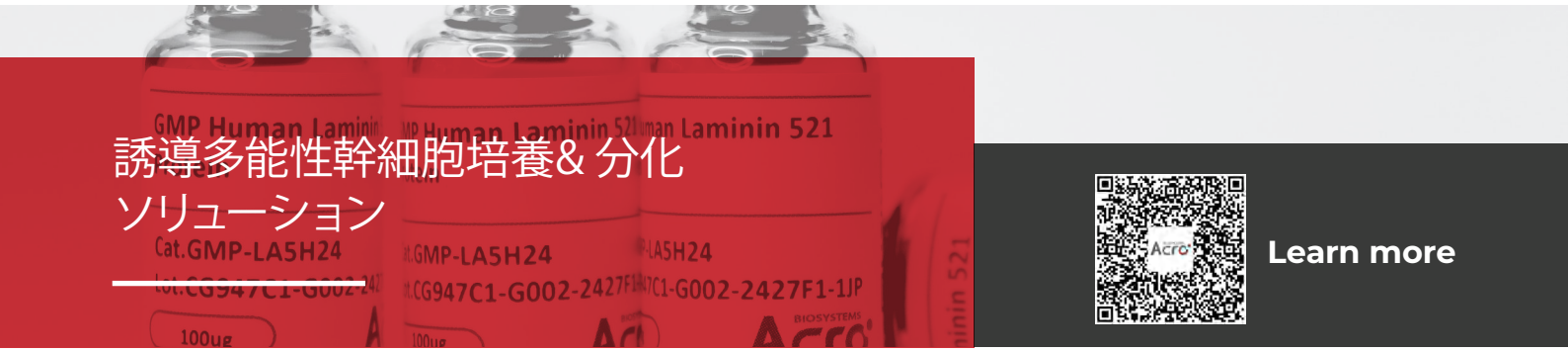


誘導多能性幹細胞培養& 分化ソリューション

Learn more

ヒト人工多能性幹細胞（iPSC）は、個人向けの治療法に革命をもたらし、新薬の研究と疾患モデリングを強化することができます。これらの進歩には、iPSC を特定の細胞タイプに分化させないといけません。

当社の成長因子、細胞外マトリックスタンパク質、磁気ビーズ、キットは、iPSC の培養と分化にご利用いただけます。

成長因子と磁気ビーズ

- iPSCs differentiate into HSCs

BMP4	FGF basic	FLT3L	SCF	TPO	VEGF

- HSCs differentiate into T cells/ NK cells

IL-2	IL-3	IL-7	IL-15	IL-21	DLL4
VCAM1	FLT3L	SCF	TPO	DLL4 Beads	DLL4/VCAM1 Beads

- iPSCs differentiate into Neuron cells

BDNF	FGF basic	FGF8b	GDNF	Noggin	Sonic Hedgehog	TGF-β3

- iPSCs differentiate into Cardiac cells

Activin A	BMP4	FGF basic	VEGF

フオ-カス製品

- GMP Grade Laminin 521

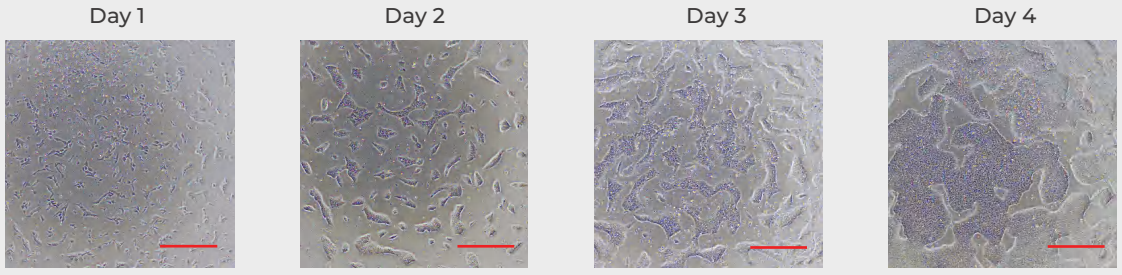


Figure 1. Laminin 521 (GMP-LA5H24) effectively maintains the expansion of human iPSCs.

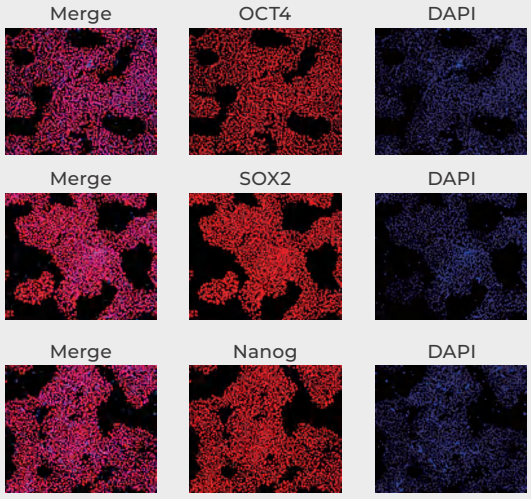


Figure 2. Laminin 521 (GMP-LA5H24) could maintain the stemness of iPSC after several passages.

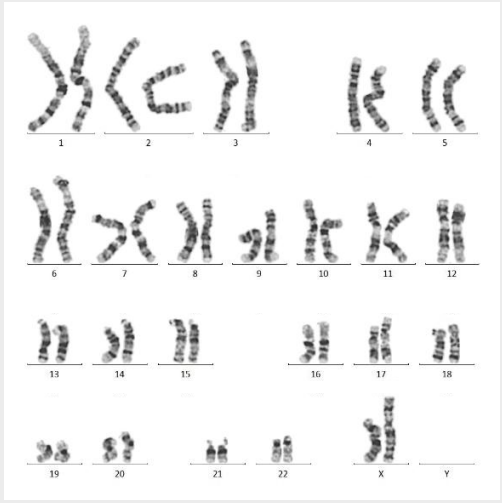
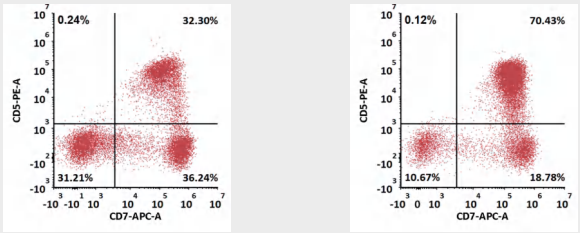


Figure 3. Normal karyotype (46, XX) was found in hiPSCs with Laminin 521 (GMP-LA5H24) coating after 10 passages.

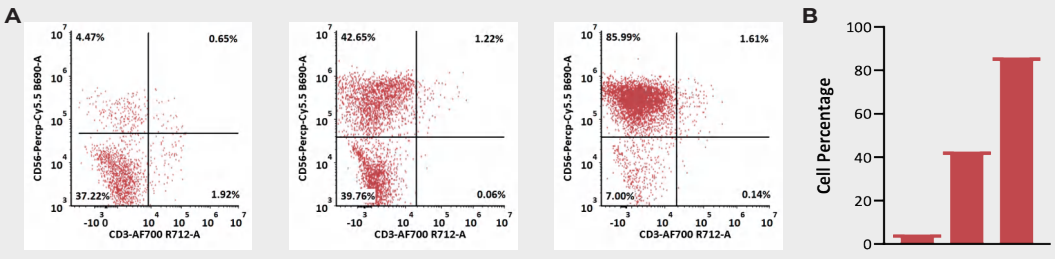
- GMP Grade DLL4 & VCAM1



DLL4 - Fc	+	+
VCAM1 - Fc	-	+

DLL4 (GMP-DL4H28) & VCAM1 (GMP-VC1H25) could highly support $CD5^+$ $CD7^+$ T-cell progenitor differentiation from $CD34^+$ HSPC.

Hematopoietic cells differentiate to $CD3^-$ $CD56^+$ NK Cells after 25 days of Culture



DLL4 - Fc	-	+	+	-	+	+
VCAM1 - Fc	-	-	+	-	-	+

The combination of DLL4 (GMP-DL4H28) & VCAM1 (GMP-VC1H25) could significantly facilitate the differentiation efficiency of $CD56^+$ $CD3^-$ NK cells.

オルガノイド培養試薬

オルガノイド培養用サイトカイン

In vitroの 3次元培養では、オルガノイドは長期間にわたってin vitroで拡張され、主要な器官特性を保持することができます。細胞培養は、高品質のオルガノイドを得るための重要な部分です。現在において、細胞増殖因子とマトリックスを用いた3次元培養システムが、オルガノイド培養の主流技術となっています。

ACROBiosystemsでは、EGF、Noggin、R-Spondin 1、BDNF、GDNF、FGF10、HGF、FGF basic、TGF-βなど様々な高品質なサイトカインを開発し、オルガノイド3次元細胞培養に関する研究をサポートしてきました。これらのサイトカインの高い生物活性はオルガノイドの増殖により確認されており、オルガノイド培養に適しています。

- 製品特徴

- Sterile
- Carrier Free
- High bioactivity Verified by Cell-based Assay
- Low Endotoxin≤0.1 EU/μg
- High Purity≥95%
- Consistent between Batches
- Animal-origin Free
- Similar to Natural Conformation and Modifications
- Premium and GMP Grades Available

- 製品一覧

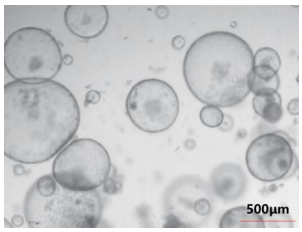
Product Type	Cat.No.	Product Description
EGF	EGF-H52H3	Human EGF Protein, His Tag, premium grade
Noggin	NON-H5257	Human Noggin Protein, Fc Tag, premium grade
R-Spondin 1	RS6-H4220	Human R-Spondin 1 / RSPO1 (21-146) Protein, His Tag, premium grade
BDNF	BDF-H5219	Human BDNF / Abrineurin Protein, premium grade
GDNF	GDF-H5219	Human GDNF / ATF / hGDNF Protein, premium grade
HGF	HGF-H52H3	Human HGF Protein, His Tag, premium grade
FGF-2	BFF-H4117	Human FGF basic Protein, premium grade
FGF-7	FG7-H52H5	Human FGF-7 / HBGF-7 / KGF Protein, His Tag, premium grade
FGF-10	FG0-H5145	Human FGF-10 / KGF 2 Protein, His Tag
Activin A	ACA-H421b	Human Activin A / INHBA Protein, premium grade
IGF-I	IG1-H5245	Human IGF-I Protein, His Tag, premium grade
NRG1	NR1-H5268	Human NRG1 Beta 1 Protein, Fc Tag, premium grade
VEGF121	VE1-H4213	Human VEGF121 Protein, premium grade
TGF-beta 1	TG1-H4212	Human TGF-Beta 1 / TGFB1 Protein, premium grade
BMP-2	BM2-H4117	Human BMP-2 Protein, premium grade
Shh	SH7-H5229	Human Sonic Hedgehog / Shh Protein, His Tag, premium grade

Verification Data

Validated in Multi Organoids Culture, with Excellent Performance, Superior to Competing Products

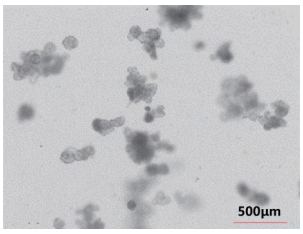
The organoid culture cytokines provided by ACROBiosystems have been validated on several organoid models, such as gastric organoids, small intestine organoids, colon organoids, liver and bile duct organoids, brain organoids, vascular organoids, and other in vitro organoid models, and all of them can well maintain organoid growth with excellent performance.

Gastric Organoids



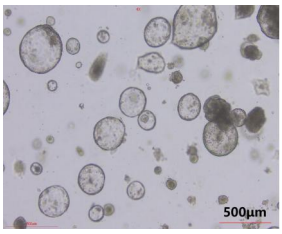
Human EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1 (Cat. No. RS6-H4220), FGF10(Cat. No. FG0-H5145). These cytokines are highly active to maintain gastric organoids growth and passaging with excellent performance.

Small Intestine Organoids



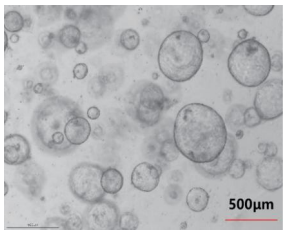
Human EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1 (Cat. No. RS6-H4220). These cytokines are highly active to maintain small intestine organoids growth and passaging with excellent performance.

Colon Organoids



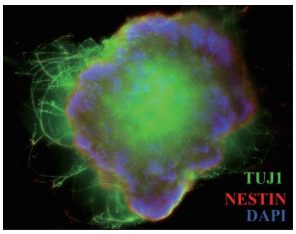
EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1(Cat. No. RS6-H4220). These cytokines are highly active to maintain colon organoids growth and passaging with excellent performance.

Liver and Bile Duct Organoids



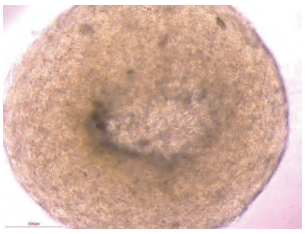
Human EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1 (Cat. No. RS6-H4220), FGF7 (Cat. No. FG7-H52H5), FGF10 (Cat. No. FG0-H5145), HGF (Cat. No. HGF-H52H3). These cytokines are highly active in maintaining liver and bile duct organoids growth and passaging with excellent performance.

Brain Organoids



BDNF (Cat. No. BDF-H5219), GDNF (Cat. No. GDF-H5219). These cytokines induced iPSC-derived brain organoids growth with high activity, as well as high expression of TUJ1 (neural cell marker gene) and NESTIN (neural stem cell marker gene).

Vascular Organoids



VEGF110 (Cat. No. VE0-H5212). These cytokines are highly active in promoting the growth of iPSC-derived vascular organoids with typical vascular morphology.

EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1 (Cat. No. RS6-H4220), developed by ACROBiosystems have been validated by multi organoids culture. The cell viability (CTG method) of these organoids is better than that of competing products.