ExCell

Optivitro® Matrix

Extensive Choices, Precise Matching

Providing comprehensive,
high-quality 3D culture solutions for your cuttimg-edge research



Suzhou Excell Biotechnology Co., Ltd.

Product Overview

The matrix is a soluble basement membrane extracted from Engelbreth-Holm-Swarm (EHS) mouse sarcoma, which is rich in various collagens. Its main components include laminin, type IV collagen, heparan sulfate proteoglycan, entactin, and multiple growth factors. It acts as an extracellular matrix outside cells in vitro, providing an optimal 3D culture support for various cell types. It is applied in organoid culture, stem cell expansion and differentiation, angiogenesis, cell invasion/metastasis modeling, and other research fields, helping to achieve more authentic and accurate cell phenotype and function research.

Stringent Quality Control Standards
Strict quality control for sterility, mycoplasma, and endotoxin, with application of LDEV reduction tests to ensure batch-to-batch consistency.

Ultra-Low Endotoxin Levels
< 1.5 EU/mL, ensuring cell safety and reducing experimental interference.

Excellent Compatibility
Compatible with multiple mainstream organoid culture media, providing high compatibility for experimental design.

Outstanding Performance
Rapidly forms a stable 3D matrix at 37°C.

Superior Stability
Performance remains stable after 15 repeated freeze-thaw cycles.

Comprehensive Technical Support
Provides detailed product manuals and technical support.

Product Data

1 Small Intestinal Organoids

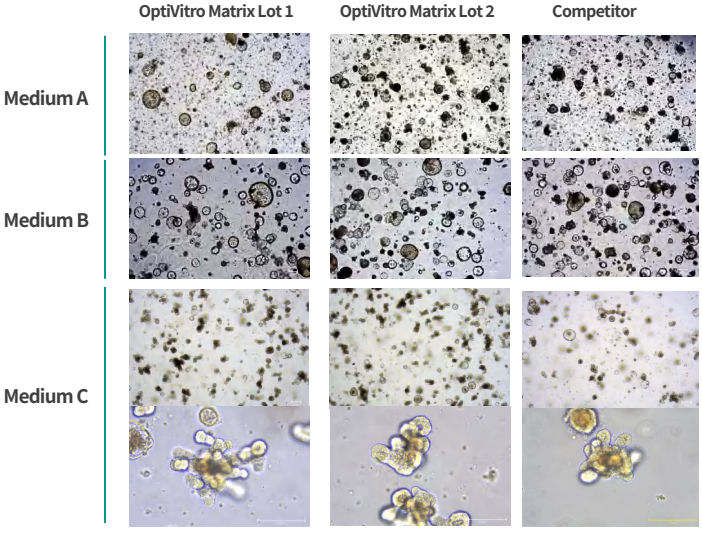


Fig 1. OptiVitro® Matrix GFR(Phenol Red-free) supports the expansion and morphology of small intestinal organoids with different organoid culture media.

2 Colony Morphology of Human Pluripotent Stem Cells (hPSC)

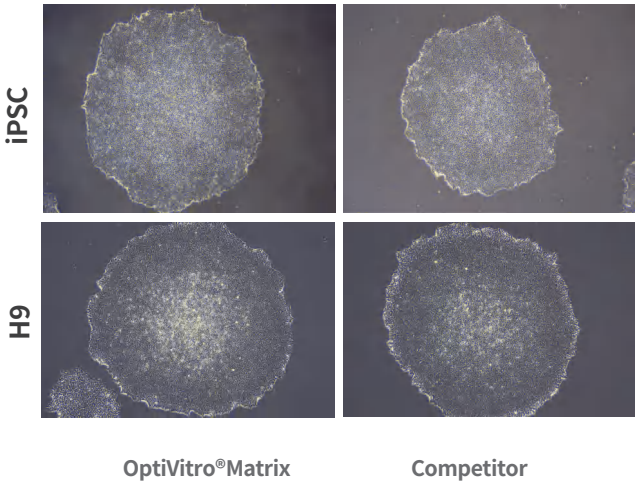


Fig 2. OptiVitro® Matrix hESC-Qualified (Phenol Red-free) maintains hPSC colony morphology with no significant difference compared to the competitor matrix.

3 Marker Expression of Human Pluripotent Stem Cells (hPSC)

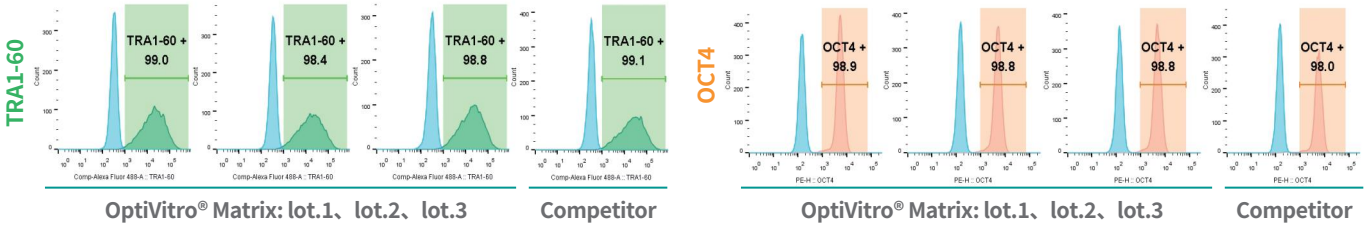


Fig 3. After 5 consecutive passages with OptiVitro® Matrix hESC-Qualified (Phenol Red-free), the positive rate of hPSC marker detection is >95%, with no significant difference compared to the competitor matrix.

4 Proliferation of Human Pluripotent Stem Cells (hPSC)

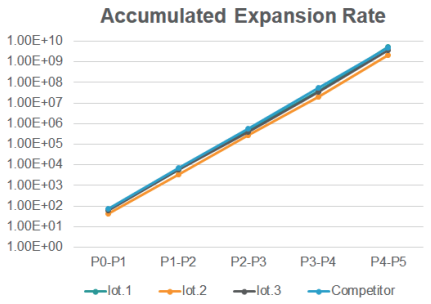
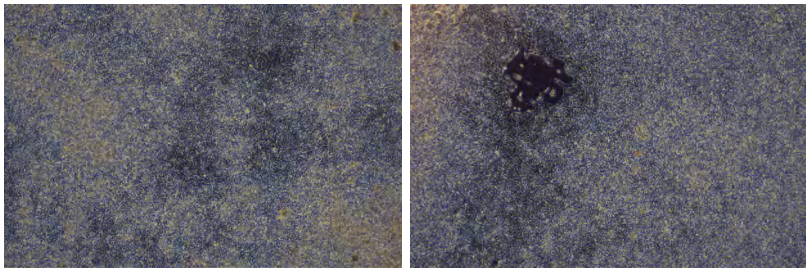


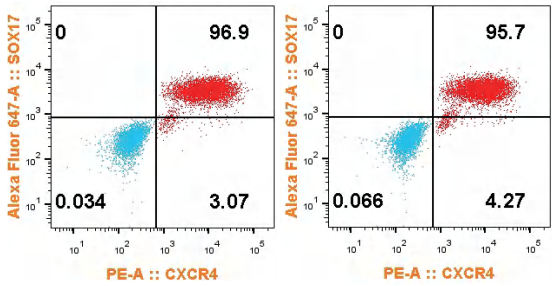


Fig 4. After 5 consecutive passages with OptiVitro® Matrix hESC-Qualified (Phenol Red-free), the cumulative expansion rate and population doubling time of hiPSC show no significant difference compared to the competitor matrix.

5 Differentiation Potential of Human Pluripotent Stem Cells (hPSC)



OptiVitro®Matrix Competitor



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Fig 5. After 5 consecutive passages with OptiVitro® Matrix hESC-Qualified (Phenol Red-free), the double positive rate of SOX17/CXCR4 in definitive endoderm (DE) differentiation of hiPSC is >95%, with no significant difference compared to the competitor matrix.

Product Information

Product Name	Specification	Lot.
OptiVitro® Matrix hESC-Qualified (Phenol Red-free)	1mL/5mL/10mL	RF010-N011S/N011/N012
OptiVitro® Matrix for Organoid Culture (Phenol Red-free)	1mL/5mL/10mL	RF010-N021S/N021/N022
OptiVitro® Matrix	1mL/5mL/10mL	RF010-N031SN031/N032
OptiVitro® Matrix (Phenol Red-free)	1mL/5mL/10mL	RF010-N041S/N041/N042
OptiVitro® Matrix High Concentration	1mL/5mL/10mL	RF010-N051S/N051/N052
OptiVitro® Matrix High Concentration (Phenol Red-free)	1mL/5mL/10mL	RF010-N061S/N061/N062
OptiVitro® Matrix GFR	1mL/5mL/10mL	RF010-N071S/N071/N072
OptiVitro® Matrix GFR(Phenol Red-free)	1mL/5mL/10mL	RF010-N081S/N081/N082
OptiVitro® Matrix High Concentration,GFR	1mL/5mL/10mL	RF010-N091S/N091/N092
OptiVitro® Matrix High Concentration, GFR (Phenol Red-free)	1mL/5mL/10mL	RF010-N101S/N101/N102

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Your cell,our culture

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