

Xeno-free Recombinant Human Laminin for ES/iPS Cell Culture

Overview

Matrixome®'s iMatrix-511 is a xeno-free recombinant human laminin-511 E8 fragment substrate for the maintenance and expansion of embryonic stem cells (ES) and induced pluripotent stem cells (iPS). Laminins, glycoproteins of the extracellular matrix (ECM), are a major component of the basement membrane and vital in modulating cellular functions for survival, cell adhesion, and proliferation.

Key Benefits

Promotes high efficiency reprogramming across multiple cell types

iMatrix-511, in combination with Stemgent's new StemRNA™-3rd Gen Reprogramming Kit (00-0076), is ideal for promoting high reprogramming efficiencies of human fibroblasts, blood-derived endothelial progenitor cells (EPCs) and urine-derived epithelial cells (UDCs) into iPS cells (**Figure 1**).

REPROCELL's additional quality control provides assurance that each lot of iMatrix-511 performs consistently

REPROCELL performs added quality control to each lot of iMatrix-511 on iPS cells, testing for pluripotency and colony morphology over multiple passages. This testing provides assurance each lot of iMatrix-511 has a high level of functional performance and consistently generates healthy, pluripotent iPS cell colonies (**Figure 2**).

Xeno-free substrate extends protocols to produce clinically-relevant stem cell lines

Using a xeno-free substrate moves researchers one step closer to producing clinically-relevant iPS cells to support translational research. A GMP version is also available (contact us at reprocell.com/contact for more information).

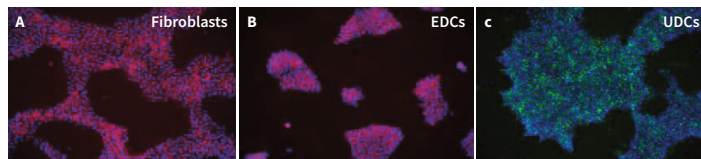


Figure 1. iPS cells cultured on iMatrix-511. iPSC cells were derived from:

A: Fibroblasts **B:** EPCs **C:** UDCs

RNA-iPS cell lines derived from three cell types using the Stemgent StemRNA 3rd Gen Reprogramming Kit (Cat. No. 00-0076). Cultures were stained with Stemgent StainAlive™ TRA-1-60 Antibody (Cat. No. 09-0068) to verify pluripotency.

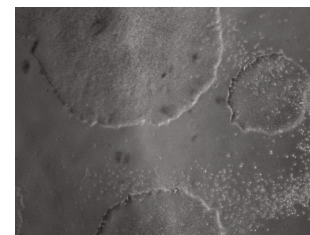


Figure 2. iPS cells cultured on iMatrix-511. iPS cells derived from urine using the StemRNA-NM Reprogramming Kit (Cat. No. 00-0076) were cultured on iMatrix-511 in NutriStem™ XF/FF Culture Medium (Cat. No. 01-0005) for 7 passages.

Ordering Information

Product	Description	Typical Usage	Cat. No.	Format
iMatrix-511	Recombinant Human Laminin-511 E8 Fragments	Pluripotent Stem Cells	NP892-011 NP892-012	2 × 175 µg 6 × 175 µg



<https://www.reprocell.com/product-catalog/cell-substrates/imatrix-511-stem-cell-culture-substrate>