Instructions for Use

TissueSpec® Matrix Solution Kit

Store at -20°C.

For research use only. Not for human or animal therapeutic or diagnostic use.

Contents and Storage

The components of the TissueSpec® Matrix Solution Kit are shipped on ice. Upon receipt, store all components at -20°C. Aliquot the matrix component to avoid freeze/thaw cycles. Kit components are listed in the table below.

Component	Quantity
Matrix	1 mL
A	1 mL

Preparation of TissueSpec® Liver Matrix Solution for Cell Culture

Important: Please review Instructions for Use prior to proceeding with solution preparation. As preparation steps vary depending on whether cells are to be cultured on a coated surface or in the presence of a media supplement, please carefully select the appropriate protocol below. Thaw all components to room temperature prior to use. Mix thoroughly by pipetting up and down between each step. Avoid introducing bubbles. Below are instructions to prepare 1 mL of TissueSpec® Matrix Solution at a concentration of 1 mg/mL.

To coat culture cell surfaces with matrix:

1. Add 90 µL Component A to 910 µL Matrix and mix thoroughly by pipetting up and down. Avoid introducing bubbles.
2. Dilute the resulting mixture with cell culture media according to use. For example, the resulting mixture may be diluted 1:10.
3. Add solution mixture to the cell culture substrate (e.g., multi-well plate, petri dish) according to your experimental setup. We recommend ~200 µL/cm^2. Please refer to the **Appendix** for suggested volumes for multi-well formats.
4. Tap or gently shake multi-well plate or dish for 30 seconds to ensure even coating of cell culture surfaces.
5. Incubate at 37°C in a humidified environment for 1 hour to coat cell culture surfaces.
6. Wash wells with 1X phosphate-buffered saline. Aspirate 1X PBS.

   Note: Do not allow coated surfaces to dry.
7. Add cell suspension to coated cell culture surface.
8. Culture cells according to standard cell culture protocols.

To culture cells with matrix media supplement:

1. Add 90 µL Component A to 910 µL Matrix and mix thoroughly by pipetting up and down. Avoid introducing bubbles.

   Note: pH of resulting mixture should be between 7.2 – 7.4.

2. Dilute resulting mixture with cell culture medium at an appropriate concentration according to cell type and experimental conditions. Optimization may be required.

3. Culture cells according to standard cell culture protocols.

For technical support, please visit **eastriverbio.com** or email **info@eastriverbio.com**

References

1. O'Neill *et al.* The regulation of growth and metabolism of kidney stem cells with regional specificity using extracellular matrix derived from kidney. *Biomaterials.* 2013.

Appendix

Multi-well plate	Volume
6	1000 – 1500 µL
12	500 – 700 µL
24	300 – 350 µL
48	100 – 150 µL
96	30– 50 µL

Rev. 6 June 2018