

## 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. Thaw at 4°C overnight and aliquot the matrix component upon receipt to avoid freeze/thaw cycles. Store all components at -20°C. Kit components are listed in the table below.

<u>Component</u>	<u>Quantity</u>
Matrix	5 mL
A	5 mL

#### Preparation of TissueSpec™ Matrix Solution for cell culture

**Note:** Thaw all components at 4°C prior to use. Keep all components cold on ice during solution preparation. Mix components thoroughly by pipetting up and down. Use the volumes below to prepare 1 mL of TissueSpec™ Matrix Solution.

#### To coat cell culture surfaces with matrix:

1. Mix 910  $\mu$ L Matrix with 90  $\mu$ L Component A by pipetting up and down. Avoid introducing bubbles.
2. Dilute the resulting mixture according to use. For example, the resulting mixture may be diluted up to 1:10 with cell culture medium.
3. Add 200  $\mu$ L/cm<sup>2</sup> solution mixture to the cell culture substrate (e.g., well plate, petri dish) or a volume corresponding to the multi-well formats below

<u>Well plate</u>	<u>Volume</u>
6	1000 $\mu$ L
12	600 $\mu$ L
24	300 $\mu$ L
48	150 $\mu$ L
96	50 $\mu$ L

4. Tap or shake plate for 30 seconds to ensure even coating of surfaces.

5. Incubate at 37°C for 1 hour.
6. Wash wells with 1X phosphate-buffered saline. Aspirate 1X PBS. 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. Mix 910 uL Matrix with 90 uL Component A by pipetting up and down. Avoid introducing bubbles.
2. Confirm that pH is between 7.2 – 7.4.
3. Dilute working stock matrix up to 1:10 with cell culture medium according to cell type and experimental conditions. Optimization may be required.
4. Culture cells according to standard cell culture protocols.

For technical support, please visit [eastriverbio.com](http://eastriverbio.com) or email [info@eastriverbio.com](mailto: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.

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