



Instructions for Use

TissueSpec™ Matrix Solution Kit

Store at -20°C.

For research use only. Not for use in diagnostic or therapeutic procedures.

Contents and Storage

The components of your TissueSpec™ Matrix Solution Kit are shipped on ice. Upon receipt, store all components at -20°C. Thaw at 4°C and aliquot matrix component to avoid freeze/thaw cycles. 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

Important: 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 instructions below to prepare 1 mL of TissueSpec™ Matrix Solution.

To coat cell culture surfaces with matrix:

1. Mix 910 μ L Matrix with 90 μ L Component A by pipetting up and down. Avoid introducing bubbles.
2. Dilute according to your experimental setup. For example, matrix may be diluted up to 1:1000 with cell culture medium.
3. Add to your cell culture substrate (e.g., well plate, petri dish) a volume sufficient to cover the cell culture surface. We recommend $\sim 200 \mu\text{L}/\text{cm}^2$. See corresponding volume for multi-well formats below:

<u>Well plate</u>	<u>Volume</u>
6	450 μ L
12	250 μ L
24	200 μ L
48	100 μ L
96	25 μ L

4. Tap or shake your plate for 30 seconds to ensure even coating of surfaces.
5. Incubate your plate at 37°C for at least 1 hour.
6. Wash wells with 1X phosphate-buffered saline. Aspirate 1X PBS.

Important: Do not allow coated surfaces to dry.

7. Add your cells to the coated cell culture surface.
8. Culture cells according to your experimental cell culture protocol.

To culture cells with matrix media supplement:

1. Mix 910 µL Matrix with 90 µL Component A by pipetting up and down. Avoid introducing bubbles.
2. Prepare a working stock by diluting matrix 1:10 with cell culture medium and mix well.
3. Confirm that the pH of the working stock is between 7.2 – 7.4. Keep working stock cold on ice.
4. Dilute working stock matrix 1:10 – 1:500 with cell culture medium according to cell type and experimental conditions. Optimization may be required.
5. Culture cells according to your experimental cell culture protocol.

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.

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