



## Native Human-Derived ECM (Solution)

Cat. No. MT004

Lot. No. (See product label)

<b>Product Description</b>	Due to its human origin and minimal processing, Native Human-Derived ECM retains the native matrix proteins and growth factors found in human tissue including collagen, elastin, laminin, glycosaminoglycans and many other matrix proteins.
<b>Application</b>	Native Human-Derived ECM is ideal for many applications including coating tissue culture surfaces to support cell attachment and growth or for making hydrogels.
<b>State</b>	Solution
<b>Concentration</b>	10 or 20 mg/mL
<b>Biological Source</b>	Human
<b>Storage/Stability</b>	Stored at -80 °C upon receipt
<b>Shelf Life</b>	6 months after opening
<b>Note</b>	<p>Making 3D Hydrogels</p> <p>Note: All procedures should be performed in a cold room or on ice. All reagents should be cooled prior to making the hydrogel. To prevent premature gelation, keep solutions between 2-10°C. Concentrations will need to be tested to determine the optimal gel concentration for each application. Native Human-Derived ECM has been tested and found to form a gel at <math>\geq 3</math> mg/mL final concentration.</p> <p>1. Thaw Native Human-Derived ECM in the fridge overnight. Aliquot Native Human-Derived ECM and freeze to minimize freeze-thaw</p>

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

[www.matexcel.com/hydrogel](http://www.matexcel.com/hydrogel)

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cycles.

2. Dilute Native Human-Derived ECM in 10-20 mM HCl with a pH of 1.9-2.1. It is recommended to use ultrapure sterile water to make the 10-20 mM HCl.

3. Prepare 10x culture medium or 10x PBS with antibiotic and antimycotic.

4. Combine 9 volumes of chilled ECM solution with 1 volume of chilled 10x concentrated medium or 10x PBS.

5. Gently swirl or pipette the mixture repeatedly.

6. Adjust the pH to 7.0-8.0 using NaOH, preferably around 7.4. Concentration and pH will affect the speed and strength of the gel. Once pH has been adjusted, cells can be added to the solution if desired.

7. Incubate at 37°C for 30-120 minutes for gel formation depending on final concentration.

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