

## A COMPARATIVE OVERVIEW



Universal Bioink™ **VS.** Traditional ECMs



### COMPOSITION

Semi-synthetic, multi-component biopolymeric mixture with no growth factors or proteins in the gel solution.

Designed to replicate the ECM with high fidelity.

Often derived from mouse tumors, containing ~2,000 undefined compounds, including various growth factors.

### **CONSISTENCY**

High batch-to-batch consistency ensures reliable results and minimizes experimental variability.

Suffer from batch-to-batch inconsistency due to undefined components.

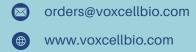
### **EASE OF HANDLING**

Liquid at warm temperatures, viscous when cooled. No ice buckets or overnight thawing needed. Activates with photocrosslinking for precise gelation.

Temperature-sensitive, requiring 4°C storage. Gelation triggered by fluctuations, making handling difficult and experiments prone to errors.

# **WANT TO LEARN MORE?**

**Explore Universal Bioink™** 



### A COMPARATIVE OVERVIEW



Universal <u>Bi</u>oink™

VS.

Traditional ECMs



#### FLEXIBILITY AND CUSTOMIZATION

Lyophilized for easy reconstitution, allowing full customization with the cell medium of choice and your additional components.

Limited customization due to undefined composition.

#### **BIOCOMPATABILITY**

Mimics native ECM, providing mechanical support and biocompatibility for various cell types, promoting viability and growth.

Tumor-derived, making it difficult to distinguish biological effects from actual experimental outcomes.

### **EASE OF IMAGING**

Transparent and optimized for imaging, minimizing interference and enhancing downstream analysis.

Undefined components cause noise, autofluorescence, and unreliable imaging results.

# **WANT TO LEARN MORE?**

**Explore Universal Bioink™**