VoxCell BioInnovation

orders@voxcellbio.com
www.voxcellbio.com

A COMPARATIVE OVERVIEW

Universal Bioink™ **VS.** Traditional ECMs

COMPOSITION

Universal Bioink™	Traditional ECMs
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

Universal Bioink™	Traditional ECMs
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

Universal Bioink™	Traditional ECMs
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?

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FLEXIBILITY AND CUSTOMIZATION

Universal Bioink™	Traditional ECMs
Lyophilized for easy reconstitution, allowing full customization with the cell medium of choice and your additional components.	Limited customization due to undefined composition.

BIOCOMPATABILITY

Universal Bioink™	Traditional ECMs
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

Universal Bioink™	Traditional ECMs
Transparent and optimized for imaging, minimizing interference and enhancing downstream analysis.	Undefined components cause noise, autofluorescence, and unreliable imaging results.

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