



**Pure
Love.
Pure
Science.**

3D CelluGel – Value from Trees

3D bioprinting is a powerful technology that can produce 3D biomedical structures, artificial tissues and organs imitating the critical characteristics of a natural tissues or organs. The lack of ideal bioinks is one of the main bottlenecks limiting the progress of bioprinting.

Solution

The 3D CelluGel is a xeno-free, nanocellulose-based bioink. Our solution includes a methacrylation step where a photocrosslinkable functionality is added to nanocellulose. Upon photocuring, it leads to a long-term stable 3D scaffold with a tuneable mechanical stiffness, an important customizable parameter for a broad range of cell lines in in vitro 3D cell culture research.

Applications

3D cell culturing and 3D cancer cell research.

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Unique benefits

- Good porosity and viscoelastic 3D-scaffolding properties supporting cells' activities
- Mechanical fragmentation to microgels -> more spatial room to promote the activity of encapsulated cells
- Suitable for different printing technologies like extrusion and DLP printing

We are looking for

- Expanding our network and knowledge in cell culture markets
- Customer and research collaborations to validate our solution
- Partnerships within the industry to accelerate the time-to-market

Team

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