

Biogelx™-INK

Try our new range of peptide hydrogel BIOINKS!

They are synthetically made, tuneable, and totally biocompatible.



PRINTABILITY AND CELL VIABILITY

Biogelx™-INKs are based on our proprietary self-assembling peptide technology, as our original Biogelx™ hydrogels for cell culture, but have been developed with printability first in mind. Like our gel products, the bioinks form a nanofibrous network, mimicking the extracellular matrix which can support cell growth, signalling, and proliferation. Additionally they have been developed to ensure the rheological properties are optimal for bioprinting applications. This guarantees Biogelx™-INKs can provide both cell viability and printability. Biogelx™-INKs can be tailored to specific applications, meaning they have huge potential in a range of fields including cell biology research, toxicology, drug screening, and regenerative medicine.

DESIGNED TO PROVIDE VERSATILITY

- **Reproducible** – Like our hydrogel range, our bioinks are totally synthetic (non-animal derived) and are manufactured under strict quality control. This ensures batch-to-batch reproducibility, which in turn guarantees consistent prints.
- **Easy-to-handle** – Gelation is triggered by the addition of cell culture media. There is no requirement for specific temperature, pH adjustment, UV curing, or addition of reactive crosslinking reagents, which can be detrimental to the health of cells.
- **Tuneable** – Like our hydrogels, the opportunity to tailor the biomimetic functionality to specific cell types is also available for our bioinks. Importantly for bioprinting, the rheological properties can also be controlled easily, meaning critical parameters like viscosity can be fine-tuned and tailored to specific printing techniques.
- **Printable** – Biogelx™-INKs have been developed for extrusion-based printing techniques. However, thanks to the tuneable mechanical properties of the base material, these can also be optimized for use in other printing technologies like we are already doing for ink-jet.
- **Biocompatible** – Our products are made of short peptides, are >95% water and provide a nanoscale structure which mimics the extracellular matrix of native tissues. The Biogelx™-INK product range includes formulations which incorporate a range of biomimetic peptide sequences, enhancing the biocompatibility of the materials with various cell types.

To request a quote please visit
3dbiotechnologysolutions.com or contact:

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BIOGELX™-INK-S

Product Description: Biogelx™-INK-S is our standard bioink: a synthetic peptide hydrogel bioink that forms a nanofibrous network, mimicking the extracellular matrix. It has been specifically developed for bioprinting and advanced 3D cell culture applications. Biogelx™-INK-S is biocompatible and has been designed to provide versatility to support different printing applications as the mechanical properties can be adapted.

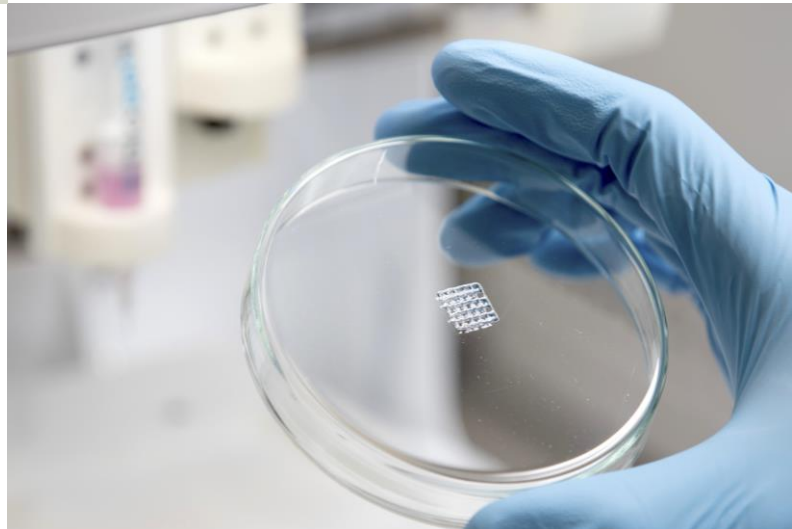


BIOGELX™-INK-RGD

Product Description: Biogelx™-INK-RGD is our fibronectin-functionalised synthetic peptide hydrogel bioink. It's like our standard Biogelx™-INK-S but includes the three amino acid sequence 'RGD' in the proper ratio and surface configuration to provide enhanced functionality. 'RGD' is a biomimetic sequence present in fibronectin, a relevant protein which is part of the native extracellular matrix.

BIOGELX™-INK-GFOGER

Product Description: Biogelx™-INK-GFOGER is our collagen-functionalised synthetic peptide hydrogel bioink. It's like our standard Biogelx™-INK-S but includes the six amino acid sequence 'GFOGER' in the proper ratio and surface configuration to provide enhanced functionality. 'GFOGER' is a biomimetic sequence present in collagen, a relevant protein which is part of the native extracellular matrix.



Biogelx™-INK products are provided as a lyophilised powder with a Biogelx™-PREP solution used to prepare the final ink formulation. The powders are stable for 1 year when stored at -20°C.

Products are available in four sizes:

100mg (~4mL) | 250mg (~10mL) | 500mg (~20mL) | 1g (~40mL).

Research grade only – Not intended for clinical use.

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