

GMP Collagen type I additive for reinforcing bioprinted constructs

50 μm Collagen Type I fibers

Produced using dry-spun 50 μm Collagen Type I fibers, **AMSBIO** has introduced the innovative **CollaFibR™** additive proven to increase the shape fidelity and biological relevance of **bioprinted constructs** in hydrogels and bioinks.



Image caption: $\mu\text{CollaFibR}^{\text{TM}}$ has been shown to improve the shape retention and durability of bioprinted cellular constructs for at least 28 days.

In the field of personalized tissue engineering,

3D bioprinting shows immense promise, but the challenge lies in achieving both mechanical durability and biological relevance in the printed constructs.

Acting as a physiologically

relevant site for cell attachment within constructs - $\mu\text{CollaFibR}^{\text{TM}}$ has been shown to improve the shape retention and durability of bioprinted cellular constructs for at least 28 days. Additionally, these short collagen fibers can enhance the mechanical strength and flexibility of hydrogels under both tension and compression, proving beneficial for 3D cell culture applications like organoids.

Offering exceptional chemical stability

and easily suspended in aqueous media, including acidic environments, $\mu\text{CollaFibR}^{\text{TM}}$ emerges as a versatile option for bioprinting. It is universally compatible with bioprinting materials such as GelMA, alginate, gelatin, and agarose, unlocking boundless possibilities in biomedical research and clinical applications.

Manufactured using GMP

compliant protocols with GMP bovine type I collagen, the quality of $\mu\text{CollaFibR}^{\text{TM}}$ is validated with a variety of cell lines including fibroblasts, myoblasts, epithelial cells, neural cells, and primary cells such as bone marrow derived MSCs.



For further information

on μ CollaFibr™ please visit <https://www.amsbio.com/3d-cell-culture-extracellular-matrices/collafibr/collafibr-additive/> or contact AMSBIO on +31-72-8080244 / +44-1235-828200 / +1-617-945-5033 / info@amsbio.com.

AMS Biotechnology (AMSBIO)

Founded in 1987, AMS Biotechnology (AMSBIO) is recognized today as a leading transatlantic company contributing to the acceleration of discovery through the provision of cutting-edge life science technology, products, and services for R&D in the medical, nutrition, cosmetics, and energy industries. AMSBIO has in-depth expertise in extracellular matrices to provide elegant solutions for studying cell motility, migration, invasion, and proliferation. This expertise in cell culture and the ECM allows AMSBIO to partner with clients in tailoring cell systems to enhance organoid and spheroid screening outcomes using a variety of 3D culture systems, including organ-on-a-chip microfluidics. For drug discovery research, AMSBIO offers assays, recombinant proteins, and cell lines. Drawing upon a huge and comprehensive biorepository, AMSBIO is widely recognized as a leading provider of high-quality tissue specimens (including custom procurement) from both human and animal tissues. The company provides unique clinical grade products for stem cells and cell therapy applications. This includes GMP cryopreservation technology, and high-quality solutions for viral delivery.

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