

Jellagen® JellaGel™

Next Generation Jellyfish Collagen Hydrogel for *in vitro* cell culture and tissue engineering.

PRODUCT DESCRIPTION

Jellyfish collagen hydrogel, suitable for 3D cell culture and tissue engineering.

Product Numbers

- JGEL20ML
- JGEL100ML

FEATURES AND BENEFITS

FEATURES	BENEFITS
Innovative	Offers a viable alternative to mammalian and synthetic hydrogels.
Non-mammalian & disease vector free	Highly purified jellyfish collagen alternative providing consistent, repeatable results.
Translatability	Suitable for translation from <i>in vitro</i> to <i>in vivo</i> applications.
Batch to batch consistency	Offers improved research productivity allowing security of product consistency and reproducible results.
Evolutionary ancient collagen demonstrating sequence homology to collagen I, II, III & V	Universal applications for multiple cell types and regenerative medicine.
Produced in a ISO13485:2016 facility	Manufactured in a controlled and safe environment, fulfilling the expectations of customers and regulatory requirements.
Inert Material	Cleaner at miRNA level when compared to mammalian alternatives giving customers a cleaner cell culture with less off-target effects.
Easy to use	Stored in liquid format at 2-8°C and material can be prepared at room temperature with your cells.
Increased surface area: media ratio	Allows for improved nutrients and waste exchange, lowering the risk of cell necrosis.

The grade of Jellagen® jellyfish collagen used to manufacture this hydrogel has been tested to verify its applicability for routine cell culture research using human primary and iPSC-derived cell lines. Jellagen® Jellyfish collagen has been shown to promote cellular attachment, proliferation and differentiation to develop functional matrices.

Cell lines that have been cultured successfully on Jellagen® jellyfish collagen include, but are not limited to: Mesenchymal Stem Cells (MSC's), fibroblasts, hepatocytes, endothelial cells, keratinocytes, chondrogenic progenitor cells, Urine Derived Stem Cells (UDC's), cardiomyocytes, ovarian cancer cells, iPSC-derived microglia, HeLa and HEK293T.

PRE GEL MATERIAL

PRODUCT INFORMATION	
Format	20ml & 100ml
Collagen	Jellyfish collagen
Concentration	4.0-4.5mg/ml
Serum level	Serum free
Storage	Store at 2-8°C
Shelf life	6 weeks from date of manufacture
Turbidity	Clear to Opaque
Bioburden	<5 CFU/ml
Shipping conditions	2-8°C
pH	2.5-3.6

SELF CONTRACTED FOLLOWING JELLAGEN PROTOCOL

PRODUCT INFORMATION	
Clarity	Opaque
Colour	Off white
pH	7.0 - 7.4

References

1. Sourour Addad, J.Exposito, C.Faye, S.Ricard-Blum, and C. Lethias. "Isolation, Characterization and Biological Evaluation of Jellyfish Collagen for Use in Biomedical Applications". Marine Drugs. 2011; 9(6): 967-983
2. Eun Song, So Yeon Kim, Taehoon Chun, Hyun-Jung Byun, Young Moo Lee. "Collagen scaffolds derived from a marine source and their biocompatibility". Biomaterials 27. 2006. 2951-2961
3. Marion Pugliano, Xavier Vanbellinghen, Pascale Schwinté, Nadia Benkirane-Jesseland Laetitia Keller. "Combined Jellyfish Collagen Type II, Human Stem Cells and Tgf-β3 as a Therapeutic Implant for Cartilage Repair." Journal of Stem Cell Research & Therapy. 2017, 7:4

DISCLAIMER

This product is for R&D use only and is not intended for human or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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