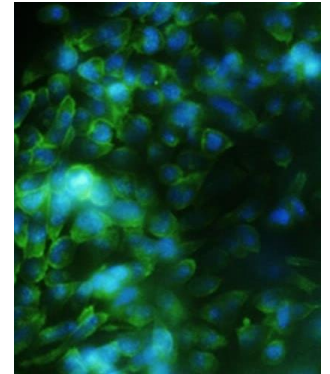




## Porcine Collagen Application Note - 3D culture

Ver 1.1

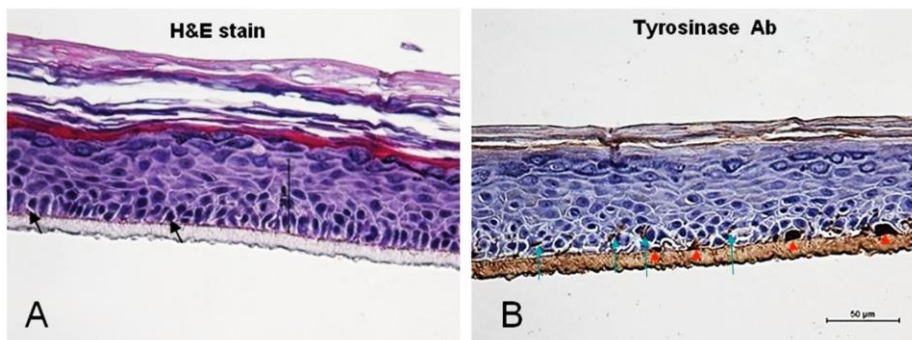
In the intricate world of mammalian cell biology, the environment plays a pivotal role in dictating cellular behavior. Cells in the human body do not exist in isolation but thrive in complex, three-dimensional (3D) surroundings. These dynamic environments, characterized by the extracellular matrix (ECM), profoundly influence cellular processes. Consequently, replicating these conditions in the laboratory has become a fundamental challenge, leading to the development of advanced cell culture techniques such as scaffold-based technologies to facilitate 3D cell culture in vitro.



### Expercy Medical Ltd.: Your Partner in 3D Cell Culture

Expercy Medical Ltd. specializes in providing high-quality type 1 collagen, elevating the possibilities of 3D cell culture. To create collagen products optimized for 3D cell culture, we combined percentage of polymer with Type I collagen. This formulation not only enhances collagen's solubility in basic solutions but also improves its affinity for absorption by scaffolds, such as sponges, and further improve cell adhesion ability in 3D culture systems.

#### Porcine Collagen Type 1 based 3D melano skin model



As the field of 3D cell culture continues to evolve, we invite you to explore the vast potential of 3D cell culture with our advanced collagen solutions and to partner with us in to unlock the potential of 3D cell culture. Find more about our formulation service:

<https://expercy.com/service/>



### Feature

- Quicker and stronger polymerization helps optimal cell distribution in 3D culture system
- Mimicking in vivo-like ECM environment
- High tensile strength with quick polymerization properties
- Adjustable to neutral pH level

### Specification

<b>Endotoxin LAL</b>	<1.0 EU/ml
<b>Purity</b>	≥ 95% Collagen contained with $\alpha$ , $\beta$ and $\gamma$ , < 5% Collagen contained within bands traveling faster than $\alpha$ (SDS PAGE electrophoresis, instant blue staining)
<b>pH</b>	2.0 – 4.0
<b>Osmolality</b>	≤ 35 mOsmo H <sub>2</sub> O/Kg
<b>Sterility (USP modified)</b>	Sterile filtered
<b>Cell Attachment</b>	Pass

