

## Bio-Byblos Biomedical, Co. Ltd.

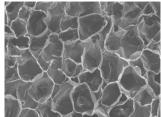
## 加樂生醫股份有限公司

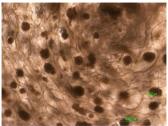


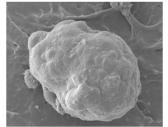
Bio-Byblos Biomedical Co Ltd is a biotechnology company founded in 2011. Since our establishment, we have been actively working on the development and production of three-dimensional (3D), porous cell culture scaffolds. The technology of 3D cell culture has opened up new possibilities for the life science community and enhances discovery of novel therapeutics to fight diseases and improve human health. Our products consist of the gelatin-based **Go Matrix**, and the cellulose-based **3D Cellusponge**. Both scaffolds allow cells (primary and cell line) to organize into spheroids that display more physiological relevance to their in vivo counterparts, thereby producing information that allows scientists to more accurately predict cellular response to drugs or toxins, hence increasing the chance of successful development of pharmaceutical/therapeutic products.

## 3D Cellusponge







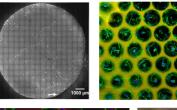


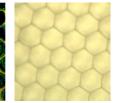
Cell types tested: MCF-7, MDA-MB, NIH-3T3, HFF, hMSC, rat primary cells, HepG2.

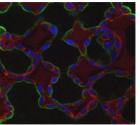
- Cellusponge: Plant-based cellulose multiporous scaffold; 9mm in diameter and 1mm in thickness. Ideal for cell types that do not require specific ligands to bind and proliferate, including soft tissue cell types, cancer cells, hepatocytes, etc. Controlled pore sizes of 100~200μm in diameter prevent core cells within a spheroid to die off due to lack of nutrients. Allows for conjugation of other function groups or proteins for specific cell types.
- Cellusponge-Collagen: Conjugation with collagen enhances stem cell proliferation up to 2 folds within seven days, compared with that in the non-coated Cellusponge.
  After two weeks of culture and maintenance, the cells can be induced to differentiate into various cell types, e.g. neural cells (Usually requires up to a month).
- Cellusponge-Galactose: For hepatocyte culture. Cells form spheroids within 24 hours post seeding and display normal liver function for up to three weeks. Ideal for drug screening and toxicity test.

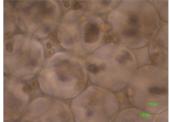
• Go Matrix: 3D cell culture scaffold made of gelatin. It features interconnected, uniform porosity and is the only scaffold on the market with such a consistent microstructure, which can facilitate formation of myotubes, cell-cell communications and chemical signal transfer. Three pore sizes are available: 60μm, 90μm, and 130μm. It also features higher stiffness than the Cellusponge series (Young's Modulus of ~120kPa vs ~4kPa), making it a much better platform for myocytes, cardiomyocytes, kidney cells, chondrocytes, osteocytes, and various tumor cells. Ideal for drug screening, tumor model establishment, stem cell differentiation study.

## **Go Matrix**









Cell types tested: A549, MDCK, C2C12, cardiomyocytes, NIH-3T3, CLI-0, CLI-5, rMSC.