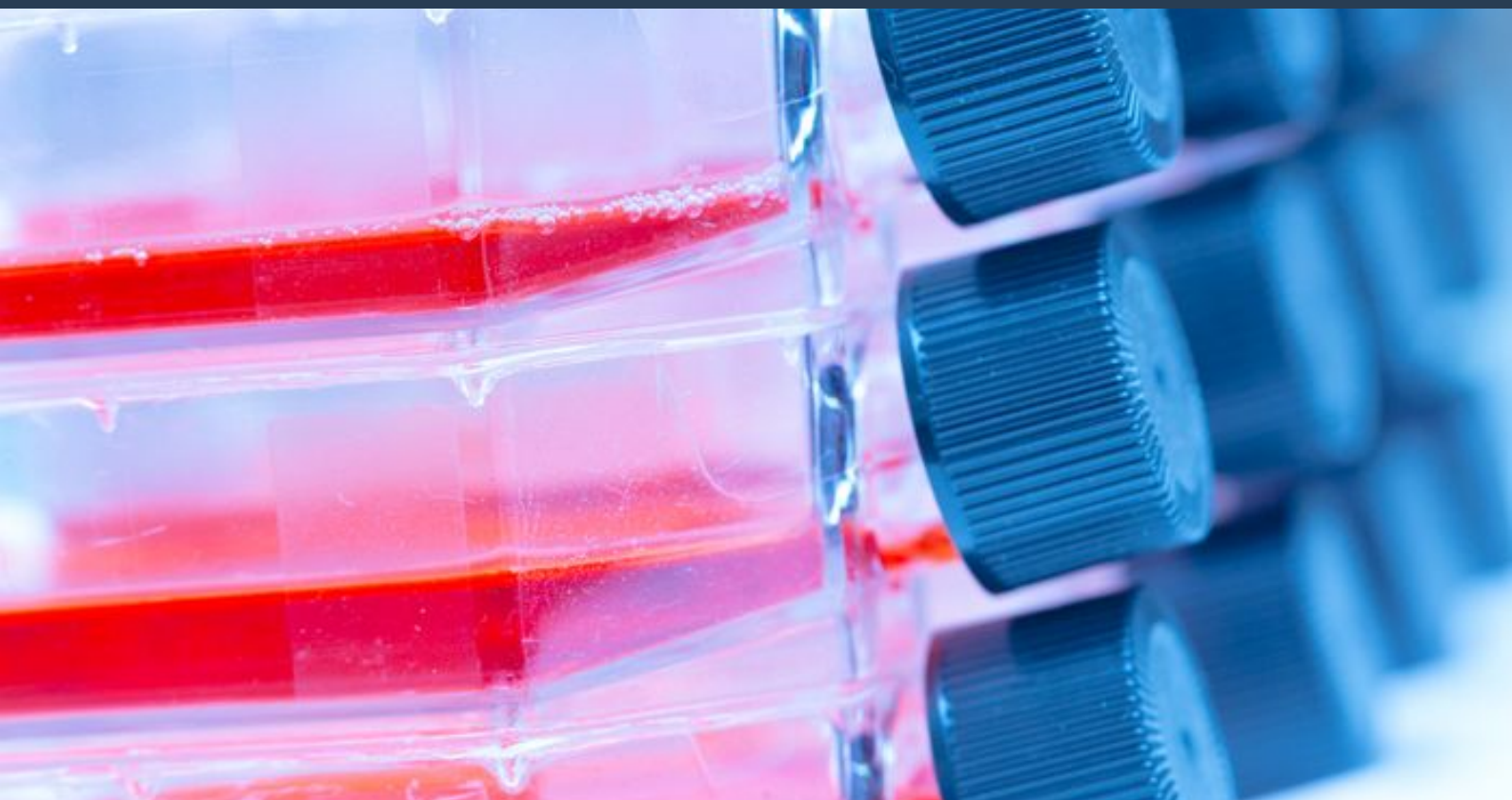


# Cell Culture Media Products and Reagents

Growing sales of a selection of products for the culturing of mammalian cells for research, pharma, biotech and food tech markets.

Reference: 2021/011



*luchschenF, stock.adobe.com*

## IP Status

Know-how based

## Seeking

Licensing, University spin out,  
Commercial partner

## About **Dublin City University**

Dublin City University (DCU) aims to transform lives and societies through education, research and innovation. Research and Innovation at DCU stems from the academic excellence of its four faculties coupled with a passion for translating knowledge into innovations for economic or societal benefit.

# Background

The global cell culture market is experiencing significant growth due to the increasing demand for monoclonal antibodies, rising funding for cell-based research, growing preference for single-use technologies, growing awareness about the benefits of cell culture-based vaccines and increasing focus on personalized medicine. Owing to the rising trend approaching the usage of component-free, and animal-derived media and the acceptance of specialty and chemically-defined media, the global cell culture market is expected to witness remarkable growth in the coming years (2017-2025). Development of specialty growth media and culture techniques that ensure specificity and availability of high-end technology for scaling up cultures are important factors that are expected to drive growth in these market segments. The key opportunities for the cell culture market are (i) Growing demand for 3D cell culture, (ii) Increased risk of pandemics and communicable diseases and (iii) Emerging economies.

The threat of new entrants in the market is low, due to high capital requirement for set up, high control of market leaders on distribution channels and the steep learning curve for production and development.

## Tech Overview

Dublin City University manufactures 6 cell culture media products for academic researchers and industry scientists and is looking for licensees to drive sales growth.

BriClone and GroClone are cell culture media supplements for manufacturing monoclonal antibodies (mAbs), making their production more predictable and productive. CHObio, CHO-Early and CHO- Late are high-grade media products for growing Chinese Hamster Ovary (CHO) cells. Finally SCORE is a high-quality cryopreservation reagent that allows cells to be securely stored over years at low temperature.

## Benefits

**BriClone** is a cost-effective and easy to use solution for antibody development scientists. **GroClone** FABs are identical to BriClone – but this time apply to antibody development scientists who must work in a more restrictive regulatory environment.

**CHObio** is a cost-effective and easy to use solution for biopharma research scientists – satisfying their product quality concerns, while facilitating adequate growth, viability and titre requirements (i.e. healthy, growing cultures) when growing CHO cells.

The benefits of **CHO-Early** and **CHO-Late** are identical to those of CHObio, with a few additional advantages. CHO-Early delivers a higher number of CHO cells early in the culture. CHO-Late delivers increased CHO productivity.

**SCORE** is a cost-effective and easy to use solution for mammalian cell culture scientists who want to reliably freeze their valuable cultures and be certain that those cells will reliably grow back once thawed, even after several years in cold storage.

## Applications

Each of the 6 cell culture media products address different customers and needs, as follows:

**BriClone** addresses the customer need (among antibody development scientists) for process predictability by improving the efficiency of the mAb-development, reducing risks of batch-to-batch variation and saving time. This results in a more predictable process and a more productive outcome with reduced development time – especially important for Industry scientists, saving money for the company.

**GroClone** addresses the same customer need as BriClone - but a different customer segment - scientists who require process predictability in a regulatory-compliant environment. It is a premium product as it is chemically-defined and serum-free. GroClone thus opens up new markets not available to BriClone to researchers who need to develop cultures in an animal- free product development system (Biopharma, In Vitro Diagnostics (IVD)).

**CHObio** addresses the customer need (among biopharma researchers) for a dependable, medium- performance CHO media that delivers consistent outcomes in routine experiments.

Existing cell culture media products that perform well for one application (i.e. growth) often perform poorly for others (e.g. productivity) – **CHO-Early** and **CHO-Late** were developed to address this challenge and are aimed to be sold together as a paired “CHO cell culture solution”.

CHO-Early addresses the customer need (among biopharma researchers) for a dependable, high- performance CHO media that delivers high growth characteristics in early-stage culture.

CHO-Late addresses the customer need (among biopharma researchers) for a dependable, high- performance CHO media that delivers higher titres of recombinant product.

When combined, CHO-Early and CHO-Late should fulfil the customer need for (i) high viable cell densities & viabilities early in CHO culture, followed by (ii) high recovery of titre during the stationary / production phase.

**SCORE** addresses the customer need (among a much broader category of mammalian cell culture scientists) for a stable reagent additive that facilitates gentle freezing & recovery of mammalian cells in a regulatory-compliant environment.

## Opportunity

Dublin City University is seeking commercial partners and licensees to grow market share of these products globally to a biotech, Pharma, university and food companies.

For Further Information please contact

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