

LARGE-SCALE STEM CELL PRODUCTION SYSTEM BY NEWLY DESIGNED BIOREACTOR

Hideaki Kagawa, Fujifilm Corporation
hideaki.kagawa@fujifilm.com
Shun Goto, Fujifilm Corporation
Mika Mifune, Fujifilm Corporation
Soichi Kohashi, Fujifilm Corporation
Tetsuya Yoshida, Fujifilm Corporation
Hidekazu Yamazaki, Fujifilm Corporation

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Large scale cell production system is required in drug discovery and cell based therapy. However there are technically challenges in maintaining high quality and low cost for practical biomanufacturing industry. 3D suspension culture is one of attractive process, especially static culture is ultimate free from shear force. Utilizing static 3D suspension culture, automated closed system is newly designed and demonstrated expansion culture over several subcultures. Cell growth curves of this system and conventional manual method have good accordance. The system is also compatible with good scalability for scale up and scale out use.

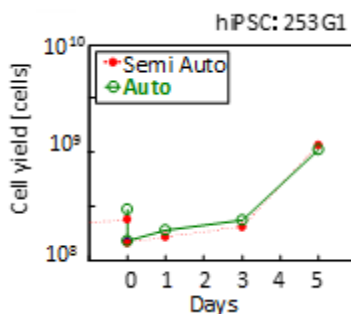


Figure 1 Cell growth curve of iPSC spheres