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AscleStem® Cardiomyocyte Differentiation Medium

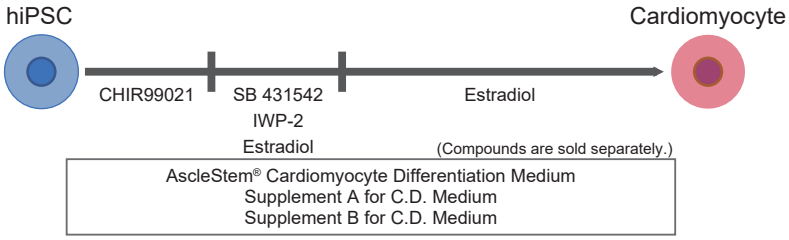
AscleStem® Cardiomyocyte Differentiation Medium (#13166-05), Supplement A for C.D. Medium (#15345-24), and Supplement B for C.D. Medium (#15346-14) are serum-free medium and serum-free supplements for inducing differentiation of human pluripotent stem cells into cardiomyocytes. By replacing cytokines with small-molecule compounds, this protocol is expected to reduce costs, and it can be applied to both the monolayer culture method (adherent culture) and the embryoid body formation method (suspension culture).

Features

01 **Differentiates human pluripotent stem cells into cardiomyocytes**
02 **Lower cost with cytokine-free protocol**
03 **Compatible with monolayer and embryoid body methods**

Product Description

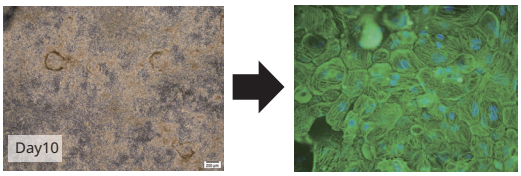
Example protocol for human iPSC-derived cardiomyocyte differentiation using this medium/supplement



Cell morphology and immunostaining results after differentiation using two culture methods

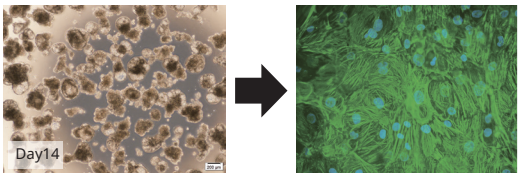
Human iPSC cell lines were differentiated into cardiomyocytes using two culture methods: the monolayer culture method and the embryoid body formation method. Expression of the cardiomyocyte marker cTnT was confirmed by immunostaining using purified cells.

● Cardiomyocytes differentiated by the monolayer culture method



cTnT / DAPI

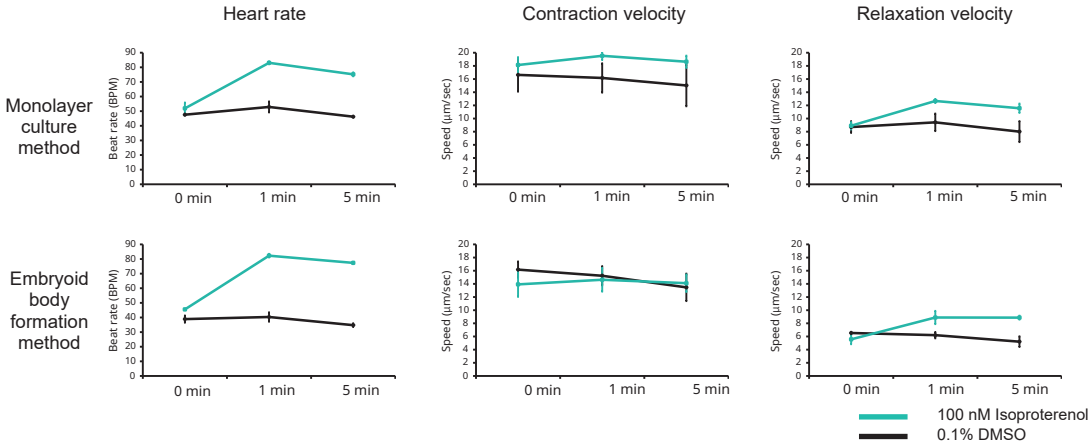
● Cardiomyocytes differentiated by the embryoid body formation method



cTnT / DAPI

Response of cardiomyocytes differentiated by two culture methods to isoproterenol

The responsiveness of cardiomyocytes differentiated from human iPS cells by two culture methods (monolayer culture and embryoid body formation) to isoproterenol was evaluated using the SI8000 Cell Motion Imaging System (Sony). Similar results were obtained with both methods.



Ordering Information

Product Name	Grade	Storage	Product No.	PKG Size
AscleStem® Cardiomyocyte Differentiation Medium	SP	Refrigerate	13166-05	500 mL
Supplement A for C.D. Medium	–	Freezer	15345-24	11 mL
Supplement B for C.D. Medium	–	Freezer	15346-14	5 mL

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