

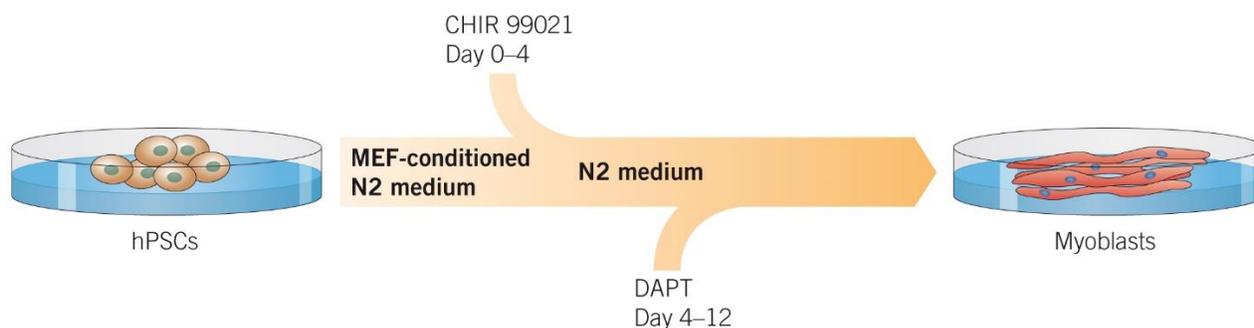
Human iPSC-derived Myoblasts

This is intended as a guide only; for full experimental details please read the reference provided.

In Brief

Choi *et al.* developed a method using small molecules to drive hiPSCs differentiation into functional myoblasts.

hiPSCs were plated in MEF (mouse embryonic fibroblast)-conditioned N2 medium for the initial stage of myogenic specification. From the next day (day 0) MEF-conditioned N2 medium was exchanged for N2 medium. By day 30 multinucleated spontaneously contractile myotubes were formed. When transplanted into the damaged tibialis anterior muscle of mice, these differentiated cells formed extensive myofibers, without tumor formation.



Cocktails

MEF-conditioned N2 Medium		N2 Medium Day 0-4		N2 Medium Day 4-12	
Y-27632	10 µM	CHIR 99021	3 µM	DAPT	10 µM
(Cat.No. 1254)		(Cat.No. 4423)		(Cat.No. 2634)	
FGF2	10 ng/ml				



Reference

Choi *et al.* (2016) Concordant but varied phenotypes among Duchenne muscular dystrophy patient-specific myoblasts derived using a human iPSC-based model. *Cell Rep.* **15** 2301. PMID: [27239027](https://pubmed.ncbi.nlm.nih.gov/27239027/)