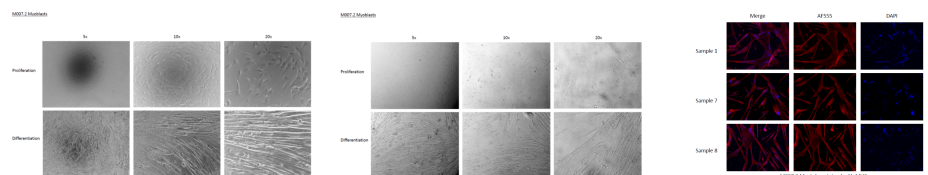




Immortalized clonal human myoblast line "M007"

Immortalized human myoblast cell line obtained from a healthy individual



Technology ID

2021-256

Category

Life Sciences/Human Health

Life Sciences/Research Tools

[View online](#)



Applications

- Research and testing of myogenesis
- Myotube development
- Differentiation
- Drug development

Technology Overview

Immortalized human myoblast cell line from primary myoblasts obtained from the muscle biopsy of a healthy individual. The cells were immortalized by overexpressing hTERT, CCND1 and a mutant CDK4, using two vectors pLV-hTERT-IRES-hygro and pbabe-cyclinD1+CDK4R24C from Addgene. These cells can grow indefinitely and can be differentiated into myotubes in vitro, by changing the medium to "differentiation medium", essentially withdrawing growth factors

Technical Information

Organism: *Homo sapiens* (human)
Tissue: Skeletal Muscle
Disease: Normal
Karyotype: 46XX [20/20 normal metaphase spreads]
Product format: Frozen

Desired Partnerships

This cell line is fully developed and available for license. Please contact our office to learn more.

Researchers

- [Michael Kyba, PhD](#) Professor, Department of Pediatrics
- [Darko Bosnakovski, PhD](#) Assistant Professor, Department of Pediatrics

References

1. Darko Bosnakovski, Erik A Toso, Elizabeth T Ener, Micah D Gearhart, Lulu Yin, Felipe F Lüttmann, Alessandro Magli, Ke Shi, Johnny Kim, Hideki Aihara, Michael Kyba(October 2023) , <https://www.sciencedirect.com/science/article/pii/S2589004223019004?via%3Dihub>, <https://doi.org/10.1016/j.isci.2023.107823>, 26