



UNIVERSITY OF MINNESOTA

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# Immortalized clonal human fibroblast line "F007"

Immortalized human fibroblast cell line obtained from a healthy individual

Technology No. 2021-257

## Applications

- Wound healing and skin regeneration
- Tissue engineering
- Skin therapy

## Technology Overview

Immortalized human fibroblast cell line from primary fibroblasts 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 fat cells in vitro, by changing the medium to adipogenic differentiation medium.

## 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

<https://license.umn.edu/product/immortalized-clonal-human-fibroblast-line-f007>