



Miltenyi Biotec

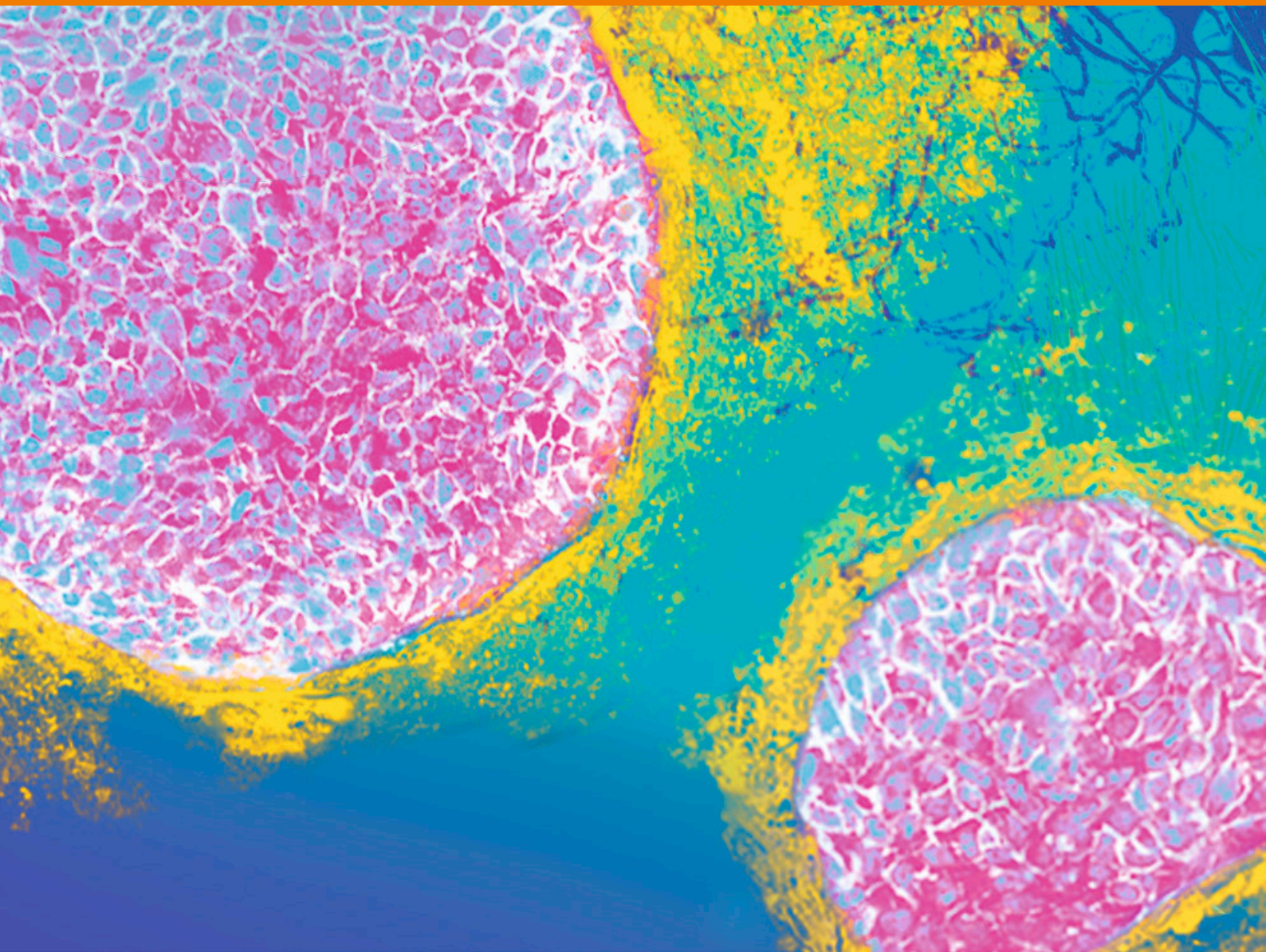
# Reprogramming human fibroblasts into induced pluripotent stem cells (iPSCs)

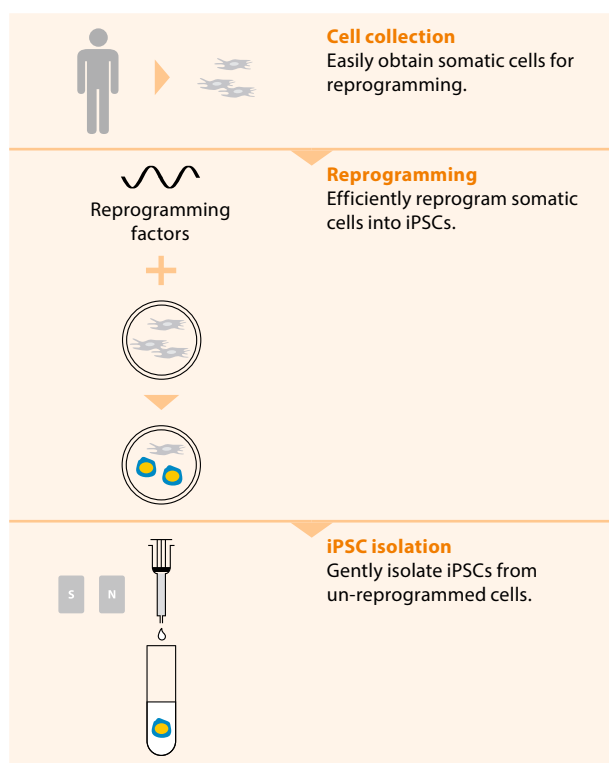
Comprehensive solutions to revolutionize your workflow

A seamless and time-saving approach for cell collection, reprogramming, iPSC isolation, characterization, and culture with our reprogramming workflow. Experience the confidence of reliable iPSCs for any downstream application.

- Cell collection – easily obtain viable somatic cells
- Reprogramming – efficiently reprogram somatic cells into iPSCs
- iPSC isolation – gently isolate iPSCs from un-reprogrammed cells

► [miltenyibiotec.com/reprogrammingworkflow](https://miltenyibiotec.com/reprogrammingworkflow)





**Figure 1:** Overview of reprogramming workflow inclusive of cell collection, reprogramming, and iPSC isolation steps.

## Effortless cell collection of fibroblasts

Cellular reprogramming of primary fibroblast cultures is the most common way to generate iPSCs. Optimize efficiency of this vital first step with the perfect combination of the Whole Skin Dissociation Kit, human, and the gentleMACS™ Octo Dissociator with Heaters. Seamlessly dissociate human skin biopsies, generate consistent monolayer cultures, and obtain abundant fibroblasts for reprogramming within 5 to 8 days.

## Rapid iPSC generation

Accelerate human fibroblast reprogramming with the StemMACS™ iPSC mRNA Reprogramming Kit, human, and achieve efficient iPSC generation with high reprogramming efficiency (up to 4%) in just 14 days. Additionally, StemMACS Repro-Brew XF, human, a xeno-free formulated medium for feeder-free mRNA reprogramming has been thoughtfully included within the kit, ensuring the utmost convenience for your workflow.

## Gentle iPSC isolation

Increase homogeneity and viability of generated iPSCs with effective isolation methods such as our magnetic cell isolation based on cutting-edge MACS® Technology with Anti-TRA-1-60 MicroBeads, human, or cell sorting with the MACSQuant® Tyto® Cell Sorter to obtain pure and homogeneous iPSCs, free from residual fibroblasts or other unwanted cells.

## Optimal PSC maintenance

After successful reprogramming, ensure optimal cell maintenance with our StemMACS PSC-Brew XF, human, while improving performance with StemMACS PSC-Support XF, human, tailored to improve performance under challenging conditions. Our StemMACS media provide essential nutrients for robust growth, preserving pluripotent phenotype, and sustaining differentiation potential of your PSCs.

## Elevated iPSC assessment with comprehensive characterization

Our streamlined StemMACS Trilineage Differentiation Kit, human, is perfect for the validation of differentiation potential across all three germ layers. This is further enriched by our simplified pluripotency assessment with an advanced multicolor panel for flow cytometry, featuring REAfinity™ Recombinant Antibodies (MBTP 25 for pluripotency assessment and MBTP 22 for differentiation potential analysis), all achieved within a 7-day time frame.

Product	Order no.
Whole Skin Dissociation Kit, human	130-101-540
gentleMACS Octo Dissociator with Heaters	130-096-427
StemMACS iPSC mRNA Reprogramming Kit, human	130-132-990
StemMACS Repro-Brew XF, human	130-132-985
Anti-TRA-1-60 MicroBeads, human	130-100-832
StemMACS PSC-Brew XF, human	130-127-865
StemMACS PSC-Support XF, human	130-127-287
StemMACS Trilineage Differentiation Kit, human	130-115-660



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