

Stem Cells by Miltenyi Biotec

Quick
guide
inside!

► miltenyibiotec.com/stemcells

Embryonic and induced pluripotent stem cells

Pioneering solutions for ES and iPS cells research



Hematopoietic stem cells

Making headway in your HSC research

Sample preparation

- Dead Cell Removal Kit
- Pre-Separation Filters

- Smart Strainers
- Red Blood Cell Lysis Solution



Human samples

Isolation of HSCs

- CD34 MicroBead Kit UltraPure
- CD133 MicroBead Kit – Hematopoietic Tissue
- CD117 MicroBead Kit
- Lineage Cell Depletion Kit
- Flow sorting using the MACSQuant Tyto and your favorite marker panel

Mouse samples

Isolation of HSCs

- Lineage Cell Depletion Kit
- Anti-Sca-1 MicroBead Kit (FITC)
- CD117 MicroBeads
- CD105 MultiSort Kit (PE)
- Flow sorting using the MACSQuant Tyto and your favorite marker panel

Culture of HSCs

Expansion

- StemMACS HSC Expansion Media XF
- StemMACS HSC Expansion Cocktail
- MACS Cytokines, including TPO, SCF, Flt3-Ligand, Il-3, Il-6

Differentiation

- StemMACS HSC-CFU Media
- MACS Cytokines, such as Il-7, GM-CSF

Culture of HSCs

Expansion

- MACS Cytokines, including SCF, Flt3-Ligand, Il-3, Il-6

Differentiation

- MACS Cytokines, such as Il-7, GM-CSF

Phenotyping and flow cytometry

MACSQuant Flow Cytometers in combination with fluorochrome-conjugated MACS Antibodies including:

- CD34
- CD133
- CD45
- CD38
- CD90

**CHECK OUT OUR
EXCLUSIVE VIO® DYES!**

Phenotyping and flow cytometry

MACSQuant Flow Cytometers in combination with fluorochrome-conjugated MACS Antibodies, such as

- Lineage markers
- Sca-1
- CD117 (c-kit)
- CD135 (Flt3)

Molecular analysis of HSCs

- μ MACS™ mRNA Isolation Kit
- μ MACS Protein Isolation Kits (epitope tags, protein A/G)
- MultiMACS™ M96 Separator
- SuperAmp™ Technology – cDNA from just a few cells
- Magnetic mitochondria isolation
- Enhanced viral transduction with MACSductin

Translate research to clinical applications

- MACS GMP Cytokines
- CliniMACS® and CliniMACS Prodigy®
- CliniMACS Reagents, including CD133

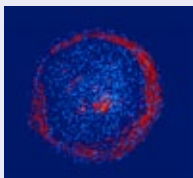
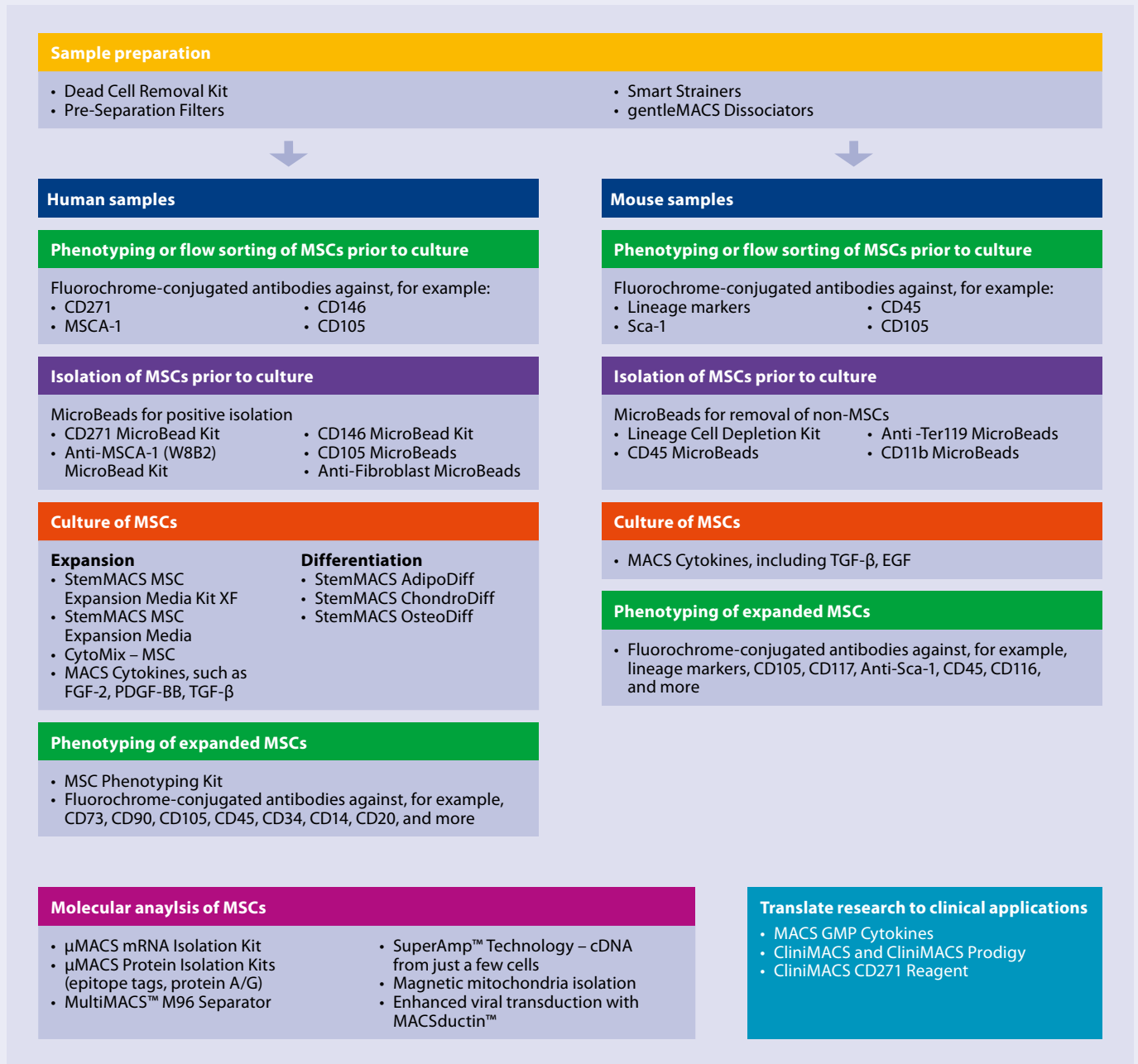


StemMACS HSC Expansion Media XF

- Xeno-free expansion of hematopoietic stem and progenitor cells
- Consistently high expansion rates
- High CD34⁺ cell content after expansion

Mesenchymal stem cells

Driving your MSC research



StemMACS MSC Expansion Media Kit XF

- Xeno-free expansion of human mesenchymal stem cells
- No attachment substrate required
- Excellent expansion rates

Embryonic and induced pluripotent stem cells

Highlighted products

StemMACS iPS-Brew XF



- Xeno-free culture system for human ES and iPS cells
- Easy transition to feeder-free conditions
- Formulation compliant with future clinical translation

► [Learn more](#)



StemMACS™ Small Molecules

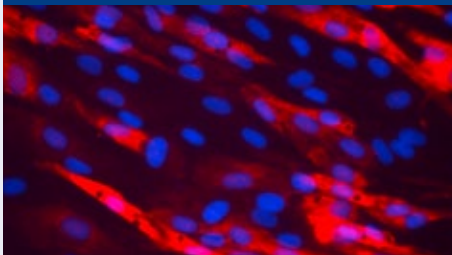


- Highly pure for consistent biological activity
- Pre-tested on stem cell cultures
- Detailed instructions for preparation of stock solutions

► [Request your free poster](#)



StemMACS™ mRNA Technology



- Modified mRNAs for modulation of cell fate by mRNA transfection
- Optimized sequences, validated expression
- Validated protocol for mRNA reprogramming

► [Download the mRNA reprogramming manual](#)



Human FGF-2 IS



- Improved sequence for increased stability in cell culture
- Standardized, high biological activity
- Produced in *E. coli*, free of animal components

► [See the data](#)





For more information visit
www.miltenyibiotec.com/stemcells



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