Miltenyi Biotec

StemMACS™ HSC Expansion Media XF

A xeno-free culture system for hematopoietic stem cells

StemMACS™ HSC Expansion Media XF enables robust expansion of hematopoietic stem cells from cord blood, bone marrow, or peripheral blood. Combine with the StemMACS HSC Expansion Cocktail, an optimized cytokine set, to create a xeno-free culture environment that preserves high levels of primitive $CD34^+CD133^+$ hematopoietic cells.

- **Xeno-free**
- **Consistently high expansion rates**
- **High $CD34^+$ cell content after expansion**

▸ **miltenyibiotec.com/hscexpansion**

Maintain high levels of CD34⁺ cells and differentiation potential

StemMACS HSC Expansion Media XF, supplemented with the StemMACS HSC Expansion Cocktail, consistently performs alongside the best available CD34⁺ culture systems. Additionally, hematopoietic progenitor cells cultured in StemMACS HSC Expansion Media XF give rise to all major CFU types, including primitive CFU-GEMMs, indicating the preservation of broad hematopoietic differentiation potential.

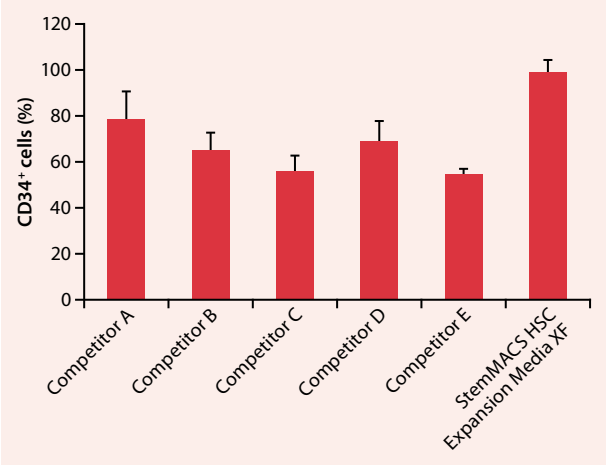

Figure 1: Cryopreserved CD34⁺ cells separated from cord blood were expanded for seven days in the indicated media (competitors A–E or StemMACS HSC Expansion Media XF) supplemented with StemMACS HSC Expansion Cocktail (n=4; mean +/– SD). Values were normalized to StemMACS HSC Expansion Media XF. When compared with other available CD34⁺ culture systems, StemMACS HSC Expansion Media XF consistently outperformed in maintaining high levels of CD34⁺ cells during expansion.

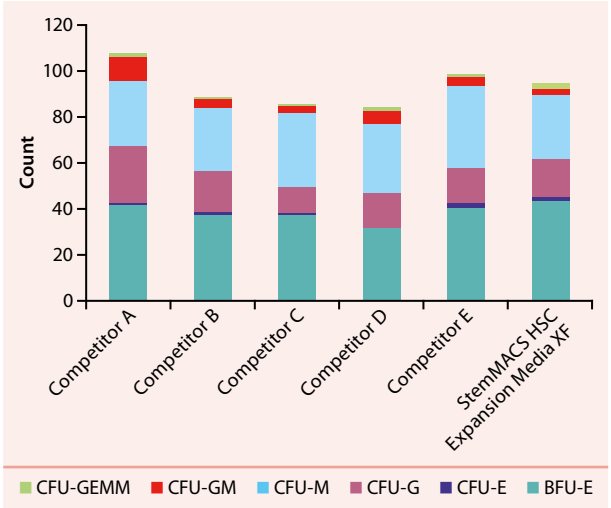

Figure 2: Isolated CD34⁺ cord blood cells were expanded in the indicated media (competitors A–E or StemMACS HSC Expansion Media XF) plus StemMACS HSC Expansion Cocktail. After seven days, cells were analyzed for their CFU potential. Cells cultured in StemMACS HSC Expansion Media XF maintained broad hematopoietic differentiation potential.

Ensure typical HSC surface phenotype

Cells expanded in StemMACS HSC Expansion Media XF maintain the characteristic surface phenotype of early hematopoietic progenitors.
Compared to competitor media, cells cultured in StemMACS HSC Expansion Media XF typically show a higher proportion of phenotypically primitive cells.

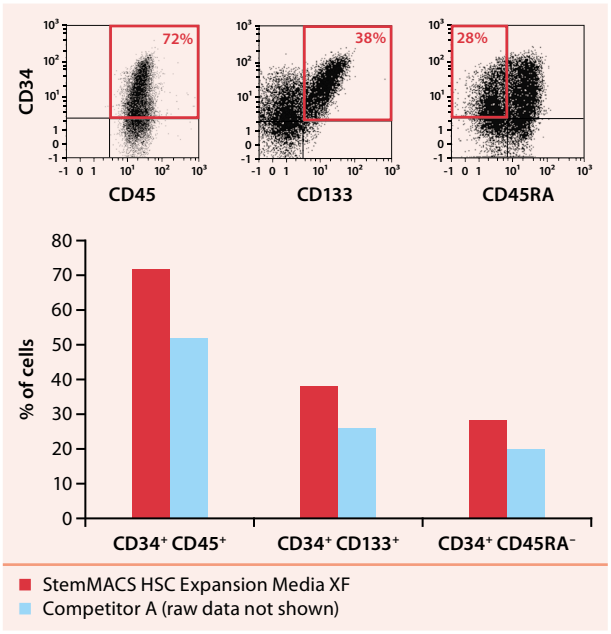

Figure 3: CD34⁺ cord blood cells were expanded for seven days in StemMACS HSC Expansion Media XF (red) or competitor media (blue) supplemented with StemMACS HSC Expansion Cocktail. The cell surface phenotype was assessed by flow cytometry.

Product	Capacity	Order no.
StemMACS HSC Expansion Media XF	500 mL	130-100-463
StemMACS HSC Expansion Media XF	100 mL	130-100-473
StemMACS HSC Expansion Cocktail	for 100 mL	130-100-843

Miltenyi Biotec B.V. & Co. KG | Friedrich-Ebert-Straße 68 | 51429 Bergisch Gladbach | Germany | Phone +49 2204 8306-0 | Fax +49 2204 85197
macsde@miltenyi.com | **www.miltenyibiotec.com**

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