

## NK MACS<sup>®</sup> Medium Optimized expansion of human NK cells

Make the right choice for robust expansion – choose NK MACS<sup>®</sup> Medium. It offers the perfect solution to expand and activate human natural killer (NK) cells from various sources, including peripheral blood mononuclear cells (PBMCs) or isolated NK cells. Its defined formulation enables expansion of NK cells that are fully functional, ready for any downstream application.

- Superior NK cell expansion\*
- Xeno-free
- Minimal growth of unwanted cells like B-, T-, and DC cells

\*Supplementation with serum or autologous plasma is necessary

### miltenyibiotec.com/nkexpansion

#### Superior expansion of NK cells

NK cell expansion from PBMCs or isolated NK cells in NK MACS<sup>®</sup> Medium compared to other standard culture methods.



**Figure 1:** NK cells in NK MACS Medium showed superior expansion compared to standard culture methods. NK cell fold expansion from (A) PBMCs (n=3) or (B) isolated NK cells (n=3) using 5% AB serum and 500 IU/mL of IL-2. (C) Cell composition after 14 days of PBMC expansion in different standard culture media. NK (CD3<sup>-</sup>CD56<sup>+</sup>), T cells (CD3<sup>+</sup>), NKT (CD3<sup>+</sup>CD56<sup>+</sup>) and other (CD3<sup>-</sup>CD56<sup>-</sup>).

# NK cells ready for any downstream application

NK cells cultivated in NK MACS Medium retain their natural cytotoxicity against the K-562 cell line and are suitable for any downstream application including cytotoxicity killing assays and flow cytometry analysis.



**Figure 2:** NK cells were expanded for 9 days in NK MACS Medium starting from (A) PBMCs or (B) isolated NK cells and were analyzed via flow cytometry for cytotoxicity against K-562 cells at different effector-to-target (E:T) ratios.

#### **Order information**

Product	Capacity	Order no.
NK MACS Medium	500 mL	130-114-429
Human IL-2 IS, premium grade	10 µg	130-097-744
Human IL-2 IS, premium grade	50 µg	130-097-745
NK Cell Isolation Kit, human	1×10 <sup>9</sup> total cells	130-092-657
MACSxpress® NK Cell Isolation Kit, human	3×30 mL whole blood	130-098-185



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