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1. Description

This product is for research use only.

Components 500 mL NK MACS Basal Medium, human:

with stable glutamine
with phenol red
without animal-derived components
without antibiotics

5 mL NK MACS Supplement (100×), human

Quality control Functionality assay: *Ex vivo* expansion of human NK cells from PBMCs. Low endotoxin level by Limulus Amebocyte Lysate (LAL) assay.

Storage Store NK MACS Basal Medium, human protected from light at 2–8 °C. The expiration date is indicated on the label. Upon arrival, prepare single-use aliquots of NK MACS Supplement (100×), human and store at –20 °C. Avoid repeated freeze-thaw cycles. The expiration date is indicated on the label.

1.1 Background information

NK MACS Medium, human is an optimized cell culture medium developed for the cultivation, activation, and expansion of human NK cells. Expanded NK cells are fully functional with respect to killing capacity. As starting material isolated human NK cells or PBMCs can be used.

NK MACS Medium has a defined formulation enabling reproducible application in human cell culture. It is produced without animal-derived components.

1.2 Applications

- Cultivation and expansion of human NK cells out of PBMCs
- Cultivation and expansion of isolated human NK cells

1.3 Reagent requirements

- 5% AB serum
- Human IL-2 IS, premium grade (e.g., # 130-097-748)

2. Protocol

Before NK MACS Medium can be used, NK MACS Basal Medium and NK MACS Supplement need to be mixed.

1. For the preparation of the NK MACS Medium thaw one vial of NK MACS Supplement (100×) at 37 °C. Shake the vial gently 2–3 times during thawing procedure.
2. Add 1% of NK MACS Supplement (100×) to the NK MACS Basal Medium, e.g., add 1 mL of supplement to 100 mL of basal medium.
3. Add 5% AB serum. Mix well.
▲ **Note:** Only prepare the amount of complete medium which is used within 3 weeks. Complete medium can be used up to 3 weeks when stored at 2–8 °C. Do not freeze.
4. Prior to use, add 500 IU/mL IL-2 IS, premium grade.

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