

NK Serum-free Culture Medium Kit

Product Introduction

NK cell serum-free culture kits MCM CulLymNK-KIT01/02 are specially developed for the efficient expansion of NK cells. The kit chemical composition is clear; KIT01 does not contain any exogenous growth factors and unknown additives. Only a small amount of autologous serum (plasma) can be added during culture to provide a complete and balanced in vitro environment for NK cells expansion. The amplification system used drug-grade antibody to induce T cell apoptosis and specifically activate NK cell proliferation and enhance NK cell killing activity.



Product Information

Product	Catalogue	Item No.	Specification
NK Cell Serum-free Culture Kit	CulLymNK-KIT01	CM-NKKIT01	2.2L/set
NK Cell Serum-free Culture Kit	CulLymNK-KIT02	CM-NKKIT02	2.2L/set
Kit component details			
NK Cell Serum-free Amplification Medium	MCM CulLymNK-SFM20(A)/SFM21(A)	CM020A-1000	1000mL×2
NK Cell Serum-free Activation Medium	MCM CulLymNK-SFM20(B)/SFM21(B)	CM020B-200	200mL
CulLymNK-CCK1	NKMKIT01-01	NK-CCK1ST	Standard combination set
CulLy mNK-CCK2	NKMKIT01-02	NK-CCK2ST	
CulLymNK-CCK3	NKMKIT01-03	NK-CCK3ST	
CulLymNK-CCK4	NKMKIT01-04	NK-CCK4ST	
CulLymNK-CCK5	NKMKIT01-05	NK-CCK5ST	

Product Advantage

- Stable and safe: medical level factors, component clear, animal origin-free, no trophoblastic layer required;
- High NK purity: 14-day CD3-CD56+ purity > 60%, CD56+ > 70%, CD16+ > 70%;
- Excellent expansion ability: supporting NK cell fast expansion in vitro;
- High killing efficiency: great killing ability towards K562, when E: T=20:1, the killing efficiency can reach 95% when expanded to D14, D21;
- cGMP standard production conditions, using disposable manufacturing techniques to ensure highly stable and consistency of different batches.



Using Method

1. Antibody-coated culture flasks.
2. Isolation of plasma and plasma heat inactivation, and isolation of peripheral blood mononuclear cells (PBMC) by density gradient centrifugation.
3. Antibody-specific activation of NK cells and targeted expansion of NK cells.
4. At the end of the culture, centrifuge to remove the medium and collect the cells.



Application Case

Figure I. NK cell growth curve

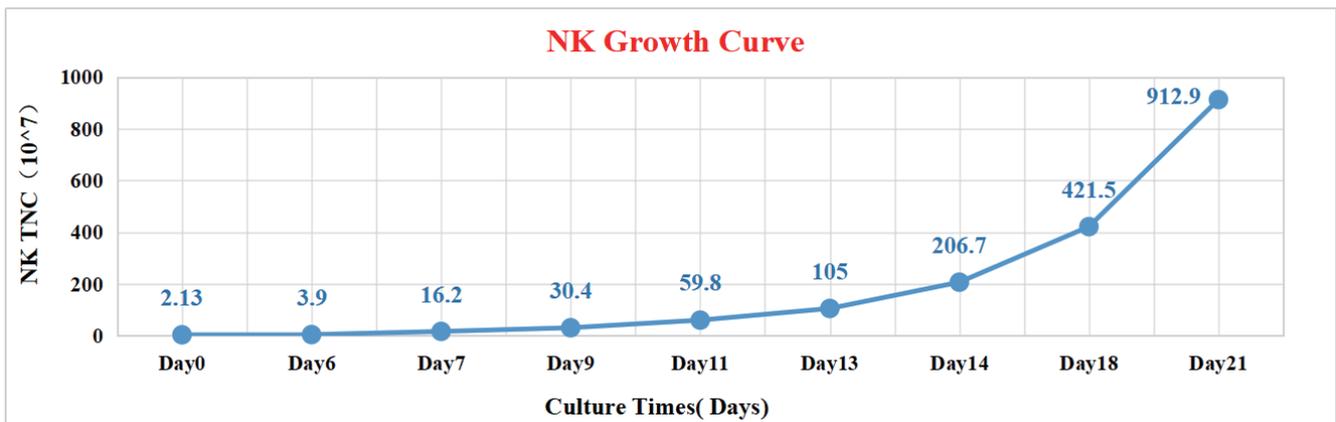
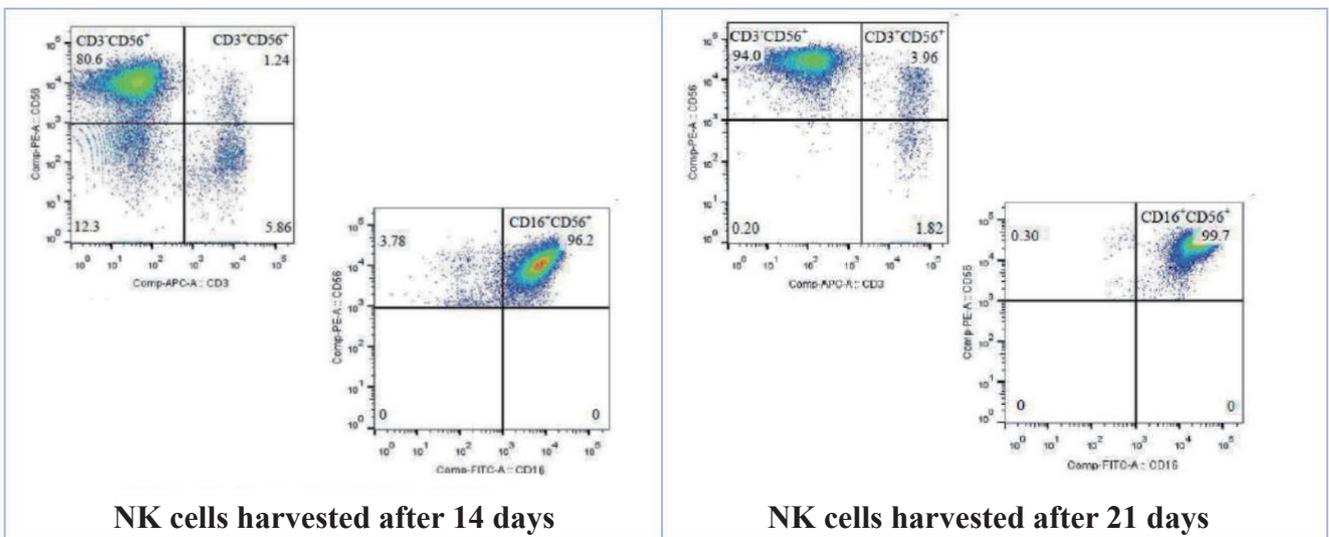


Figure II. NK cell flow assay



Culture Days	CD3 ⁺	CD56 ⁺	CD16 ⁺	CD3 ⁻ CD56 ⁺	CD56 ⁺ CD16 ⁺	CD3 ⁺ CD56 ⁺	Motility rate
14d	7.4%	79.7%	78.9%	80.6%	96.2%	1.5%	96.4%
21d	5.1%	97.1%	98.4%	94.0%	99.7%	4.2%	94.1%