

# ExCell Bio

## **OptiVibro<sup>®</sup> NK Cell Serum-free Medium NE01 (phenol red-free)**

For Research and Manufacturing Use

Not Intended for Diagnostic and Therapeutic Use

### **User Manual**

Catalog Number	NE000-N042
	NE000-N041
	NE000-N041S



## PRODUCT DESCRIPTION

OptiViro® NK Cell Serum-Free Medium NE01 (phenol red-free) is a serum-free, xeno-free, and cytokine-free medium specifically designed for the maintenance and expansion of natural killer (NK) cells. This medium includes OptiViro® NK Cell Serum-free Basal Medium NE01 (phenol red-free) and OptiViro® Immune Cell Serum-free Medium Supplement UE01. Compared to traditional serum-containing media, OptiViro® NK Cell Serum-Free Medium NE01 (phenol red-free) reduces the risk of xeno-infectious agents, ensures batch-to-batch consistency, and prevents over-activation and exhaustion of NK cells due to undefined serum components, making it suitable for clinical and large-scale applications.

## SPECIFICATION, STORAGE AND TRANSPORTATION

### REQUIREMENT

Product Name	Cat. #	Specification	Storage	Transportation	Shelf Life
<b>OptiViro® NK Cell Serum-free Medium NE01 (phenol red-free)</b>	<b>NE000-N042</b>	<b>1000 mL kit</b>	-	-	-
OptiViro® NK Cell Serum-free Basal Medium NE01 (phenol red-free)	BA0142	1000 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	12 months
OptiViro® Immune Cell Serum-free Medium Supplement UE01	BA0332	8 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	18 months
<b>OptiViro® NK Cell Serum-free Medium NE01 (phenol red-free)</b>	<b>NE000-N041</b>	<b>500 mL kit</b>	-	-	-
OptiViro® NK Cell Serum-free Basal Medium NE01 (phenol red-free)	BA0141	500 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	12 months
OptiViro® Immune Cell Serum-free Medium Supplement UE01	BA0331	4 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	18 months
<b>OptiViro® NK Cell Serum-free Medium NE01 (phenol red-free)</b>	<b>NE000-N041S</b>	<b>100 mL kit</b>	-	-	-
OptiViro® NK Cell Serum-free Basal Medium NE01 (phenol red-free)	BA0141S	100 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	12 months
OptiViro® Immune Cell Serum-free Medium Supplement UE01	BA0331S	0.8 mL	2-8°C Protect From Light.	< 25°C Protect From Light.	18 months

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## | HANDLING RECOMMENDATIONS

1. Please make sure to store the cell culture medium in a light-protected environment, avoid fluorescent lamps or other lamplight exposure, and better to use colored packaging bags in the refrigerator or warehouse.
2. During the transportation of the product, it should be kept away from light. This is to prevent the product from being affected by the irradiation of fluorescent lamps or other light sources, which may lead to discoloration.
3. During the transportation of the product to the clean area, it is essential to carry out a cleaning process. The cleaning method may involve disinfectant wiping, and not utilize UV irradiation.

***Note:** When passing through transfer windows equipped with UV lamp, remember to proactively turn off the UV lamp inside the transfer window.*

4. The medium can be used with heat-inactivated autologous plasma, commercial human platelet lysate products, or human AB serum, but not with ICSR products.

## | INSTRUCTION FOR USE

### **Prepare media**

1. Equilibrate OptiVibro® NK Cell Serum-free Basal Medium NE01 (phenol red-free) and OptiVibro® Immune Cell Serum-Free Medium Supplement UE01 to room temperature for 1-4 hours.
2. In a biosafety cabinet, add 8 mL/4 mL of supplement to every 1000 mL/500 mL of basal medium. Mix by inverting 3-5 times to obtain the complete medium.

**Note:**

- 1) Allow the basal medium and supplement to equilibrate to room temperature for 1-4 hours before mixing.
- 2) Once mixed, the medium can be stored at 2-8°C, protect from light, and should be used within two weeks.
- 3) A small amount of precipitation in the supplement when stored at 2-8°C is normal and does not affect usability. The precipitation will dissolve after 1-4 hours at room temperature.

### **Activation and Expansion of NK Cells**

The prepared complete medium is suitable for the activation and expansion of NK cells. This process requires the use of NK activation cytokines or feeder cells such as K562 feeders, as well as the addition of cytokines and heat-inactivated autologous plasma (or commercial human platelet lysate) for NK expansion.

## | DISCLAIMER

1. Use the product according to the manual instructions. Deviations from these instructions are at the user's risk, and our company will not be responsible for any resulting product performance deviations.



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2. This product is for scientific research and commercial production only and is not intended for clinical diagnosis or treatment. Users assume all risks for unauthorized use, and our company shall not be responsible for any consequences.