





NB-ROC™ T Cell Serum-Free Medium

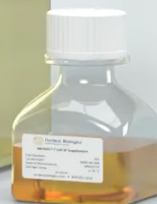
Xeno-Free and Serum-Free Expansion Medium for T Cells



 **Nucleus Biologics**
The Cell Performance Company
NB-ROC™ T Cell SF Media
Part Number: XXXX
Lot Number: XXXX-XX-XXX
Date of Manufacture: DD/MON/YYYY
Expiration Date: DD/MON/YYYY

XX-0000.00


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NB-ROC™ T Cell Serum-Free Medium

Optimized Medium for CAR-T Cell Therapy Development

The right media can ease development challenges and impact speed, cost, and quality of a final product. NB-ROC is specially optimized for CAR-T cell therapy development, primarily focused on significantly improving transduction, while maintaining all other critical attributes.

Boost Transduction Efficiency

Yield more CAR+ cells at lower viral MOI to maximize the number of CAR+ cells in your therapeutic dose, which has shown to improve outcomes.

Lower Manufacturing Cost

Decrease the amount of viral vector used in the process, resulting in reduced cost and increased safety of the final therapeutic dose.

Maintain Key Quality Indicators

Promotes proliferation and population doubling, and maintains desired phenotypes and all other quality indicators, like cell health and viability.



Transduction Efficiency Matters!

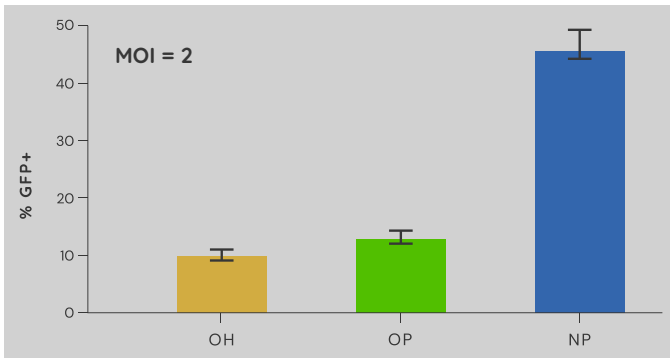
T cell immunotherapy has proven to be very promising for cancer treatment. In applying the therapy, T cells are isolated from the patient's blood and transduced with a lentivirus to express novel chimeric antigen receptors (CAR) on their surface. Once infused back into the patient, the CARs enable the T cells to recognize, attach to, and kill tumor cells. Maintaining high numbers of T cells before and after transduction is of crucial importance. By increasing transduction efficiency, cultures result in more potent cells that translates to more potent therapies, as well as safer therapies as a lower volume of virus can be used.

Our Commitment to Quality

- Certificate of Compliance or Certificate of Analysis provided at delivery
- Manufactured in a GMP environment
- Manufacturing practices certified to ISO 13485:2016
- Licensing options available

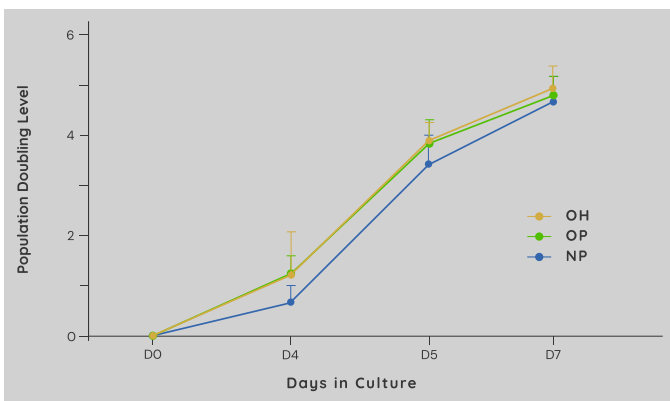
Maximize T Cell Performance

Significantly Improve Transduction Efficiency



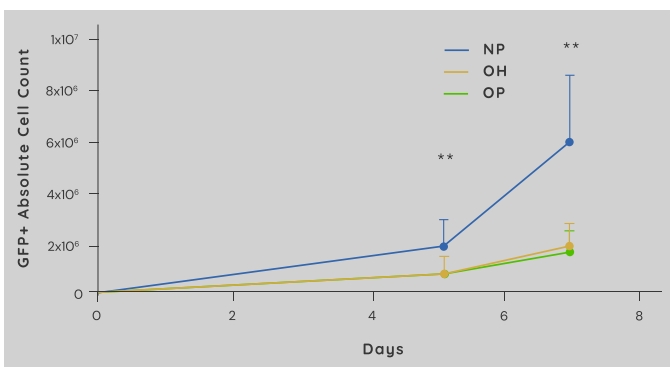
Combining NB-ROC with 2% Physiologix (NP), a serum-free complete media, improves transduction efficiency greater than threefold when compared to OpTmizer™ + 5% Human Serum (OH) and OpTmizer + 2% Physiologix (OP). Physiologix™ XF SR is Nucleus Biologics' xeno-free serum replacement made for stem cells and T cells. Data shown represents average of 3 donors \pm SD in a G-Rex® model. MOI = 2.

Promote Strong T Cell Growth



NB-ROC + 2% Physiologix (NP) supports strong population doubling equivalent to OpTmizer + 5% Human Serum (OH) and OpTmizer + 2% Physiologix (OP). Proliferation, cell health, viability, and maintenance of relevant phenotypes (assessed but not shown) are also comparable. Data shown represents average of 3 donors \pm SD in a G-Rex model.

Increase CAR+ Cells in Your Therapeutic Dose



NB-ROC increases efficacious cells in your process. Using GFP as a marker of lentiviral transduction, NB-ROC + 2% Physiologix (NP) shows significantly higher numbers of transfected cells compared to OpTmizer + 5% Human Serum (OH) and OpTmizer + 2% Physiologix (OP) after 7 days of culture. Data shown represents average of 3 donors \pm SD in a G-Rex model.

Supplement with Physiologix™

Achieve greater than threefold transduction efficiency when using NB-ROC with Physiologix.



NB-ROC™ T Cell SF Medium Ordering Information

Catalog Number	Product Name	Contents	Size	Price
1536	NB-ROC™ T Cell SF Media	NB-ROC™ T Cell SF Basal Media NB-ROC™ T Cell SF Supplement	1 L 25 mL	\$209
1537	NB-ROC™ T Cell SF Media with Physiologix™ XF SR Kit	NB-ROC™ T Cell SF Basal Media NB-ROC™ T Cell SF Supplement Physiologix™ XF SR	1 L 25 mL 2 x 10 mL	\$366
Coming Soon!	NB-ROC™ GMP T Cell SF Media	NB-ROC™ T Cell SF Basal Media NB-ROC™ T Cell SF Supplement	1 L 25 mL	Inquire
Coming Soon!	NB-ROC™ GMP T Cell SF Media with Physiologix™ XF SR Kit	NB-ROC™ T Cell SF Basal Media NB-ROC™ T Cell SF Supplement Physiologix™ XF SR	1 L 25 mL 2 x 10 mL	Inquire

NB-ROC is configured with the proteins supplied separately for long-term stability and shelf life.

Product Specifications

Classification	Xeno-free, serum-free	Shipping Conditions	NB-ROC T Cell Medium: 2-8°C Physiologix XF SR: Dry ice
Sterility	Sterile filtered basal media	Storage	NB-ROC T Cell SF Basal Media: 2-8°C NB-ROC T Cell SF Supplement: 2-8°C Physiologix XF SR: ≤-70°C
pH	6.5-7.5		365 days if not mixed
Osmolality	270-330 mOsm/Kg	Shelf Life	Recommended to use media within 2 weeks of mixing the basal media and supplement.
Included Antibiotics	No antibiotics	Thawing	Applicable to kits containing Physiologix only (Catalog Number 1537). Preferred method of thaw is 37°C water bath. Limit freeze thaw cycles of aliquots to less than three.
Quality	Research use	Research Category	T cell research
Phenol Red Indicator	Phenol red free		
Serum Level	Serum-free		
Format	Liquid		
Glutamine	Yes		
Sodium Pyruvate Additive	Yes		

