Lonza

TheraPEAK® T-VIVO® Cell Culture Medium



Elevate Proliferation, Viability, and Therapy Potential With Our Chemically Defined Medium

Reduce variability concerns with TheraPEAK® T-VIVO® Cell Culture Medium and achieve greater cell proliferation and viabilities along with increased process efficiencies. Its novel chemically defined formulation is serum-free and non-animal origin (NAO), ensuring consistency and increased process control.

TheraPEAK® T- VIVO® Medium enhances the culture and expansion of:

- $\alpha\beta$ and $\gamma\delta$ T cells
- CAR-T cells
- Peripheral blood lymphocytes (PBL)
- Tumor infiltrating lymphocytes (TIL)

With traceability documentation available including Certificates of Analysis and a Drug Master File, TheraPEAK® T-VIVO® Cell Culture Medium simplifies processes, supports regulatory compliance, and scale up from preclinical development through to manufacturing.

Features and Benefits

- Contains only recombinant proteins
- Does not require serum or serum component addition
- Greater cell proliferation
- Easy-to-use formulation only requiring addition of cytokines
- High transduction efficiencies and post-transduction viabilities
- Produced according to current GMP guidelines

With demonstrated performance in a variety of platforms including static T-flasks, spinner flasks, gas-permeable cell expansion devices, rocking platform bioreactors, stirred-tank bioreactors and the Cocoon® Platform, TheraPEAK® T-VIVO® Medium allows you to successfully generate patient treatments for numerous indications.

Optimal performance across different platforms

T-cell expansion in TheraPEAK® T-VIVO® Medium compared with other commercial media in a gas-permeable cell expansion device

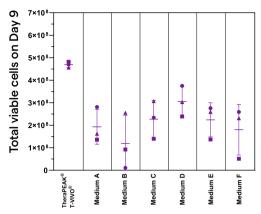


Figure 1. TheraPEAK® T-VIVO® Medium supports efficient T-cell expansion in a gas-permeable cell expansion device compared with various commercial media. All culture media are supplemented with recombinant human IL-2 (100 IU/mL). Each donor is represented by the ▲■● symbol.

Scale-up T-cell expansion in rocking motion platform and spinner flask using TheraPEAK® T-VIVO® Medium

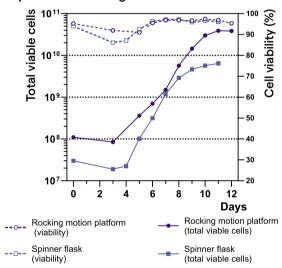


Figure 2. Full-scale T-cell expansion in spinner flask or rocking motion platform bioreactor. Peripheral blood mononuclear cells are activated via CD3 and CD28 and expanded with TheraPEAK® T-VIVO® Medium for up to 12 days. TheraPEAK® T-VIVO® Medium is supplemented with recombinant human IL-2 (100 IU/mL).

Place your order or contact us for further information

	Catalog no.	Description	Size and packaging		
	BP12-970Q	TheraPEAK® T-VIVO® Cell Culture Medium	1 Liter bottle		
	BP08-970Y	TheraPEAK® T-VIVO® Cell Culture Medium	1 Liter bag		

Customization of packaging for specific applications is available. Please contact Scientific Support for additional information.

$\gamma\delta$ T-cell Expansion from PBMCs Using Zoledronic Acid

Small-scale expansion in T-flask

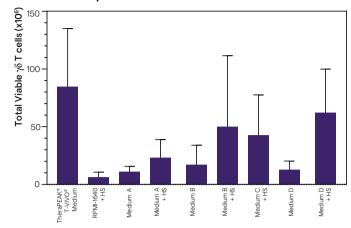


Figure 3. $\gamma\delta$ T-cell expansion out of PBMCs (2.0 x 10 $^{\rm c}$ cells) using zoledronic acid (6 μM). Recombininant human IL-2 (200 IU/mL) is used in all media.

Dav	γδ T cell		non-γδ T cell	
Day	Total viable cells	Viability %	Total viable cells	Viability %
0	0.24 x 10 ⁶	86.4%	0.24 x 10 ⁶	86.4%
7	8.0 x 10 ⁶	85.9%	9.0 x 10 ⁶	88.0%
9	28.8 x 10 ⁶	87.9%	38.6 x 10 ⁶	93.4%
12	207.8 x 10 ⁶	93.1%	274.4 x 10 ⁶	97.5%
19	6,000 x 10 ^{6(*)}	93.4%	1,500 x 10 ^{6(*)}	91.9%

* calculated based on fold-expansion from day 12-19

Table 1. Expansion of both V δ 1 and V δ 2 T cells from PBMCs using TheraPEAK® T-VIVO® Medium.

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Learn more.



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