



AKADEUM
LIFE SCIENCES

Human T Cell Activation & Expansion Kit

with BACS™ Microbubbles

**Powerful T cell activation and expansion
without overstimulation!**



Better Science Relies on Better Cells

Streamline your cell therapy workflows with the Human T Cell Activation & Expansion Kit. Using BACS™ microbubble technology, the Human T Cell Activation & Expansion Kit was designed to isolate highly pure populations of T cells and activate them for use in cell therapy workflows. This highly scalable isolation, activation, and expansion process yields the large numbers of highly activated and transducible cells needed to manufacture potent cell therapies.

In addition, the gentleness of flotation-based culture results in fewer exhausted cells than common activation methods. Akadeum's novel approach to CAR-T cell production provides improvements over current industry standard methods, and the innate scalability of BACS™ microbubbles allows for rapid optimization of cell therapy workflows.

Akadeum Life Sciences 674 S Wagner Rd, Ann Arbor, MI 48103
Akadeum.com 734.707.1233 info@akadeum.com

Why use Akadeum's T cell Activation and Expansion Kit?



Reduced cellular exhaustion during T cell activation and expansion.



Increased numbers of highly activated effector T cell populations.

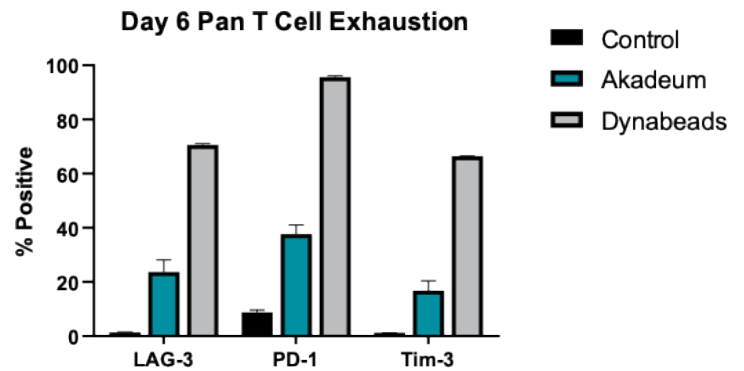
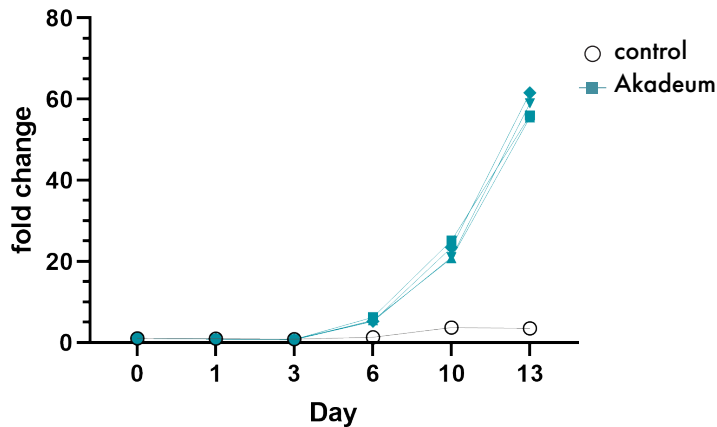


Industry-standard T cell expansion kinetics.



Scalable to fit your cell therapy workflow needs.

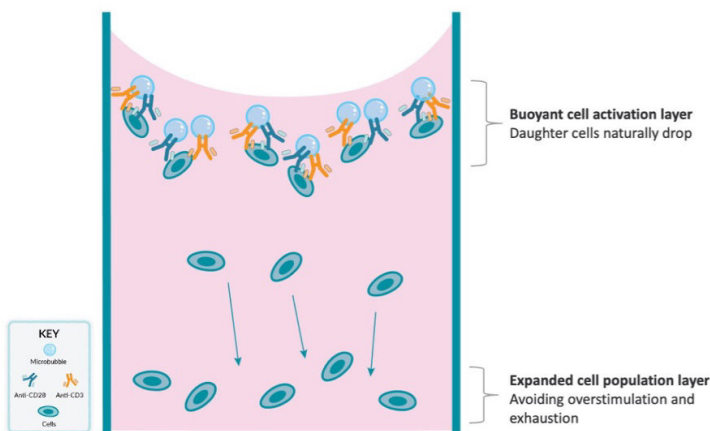
Microbubbles Produce Healthier Cells Faster



How the Human T Cell Activation & Expansion Kit Works:

Starting from leukopak material or PBMCs, T cells are labeled with biotinylated antibodies targeting CD3 and CD28. BACSTM Streptavidin Microbubbles are mixed into the sample where they bind to the labeled cells and gently float them to the surface. Unwanted cells are removed from below the microbubble later, and the positively selected T cells are transferred to a culture vessel. As the cells divide daughter cells gently settle to the bottom of the plate, ready for collection.

T Cell Activation & Expansion Example



- ✓ **Fold Expansion** greater than 20 fold over 10 days
- ✓ **Minimal expression of exhaustion markers** 25-30% PD-1+ compared to nearly 100% with competitors' product
- ✓ **Maximal expression of activation markers** 92-95% CD25+

Ordering Information: 13310-224 Human T Cell Activation & Expansion Kit