

# Human T Cell Selection, Activation, and Expansion Kit

with Akadeum Microbubbles

Flexible T cell selection, activation, and expansion without overstimulation!



#### Better Cells. Better Science.

Streamline your cell therapy workflows with the Human T Cell Selection, Activation, and Expansion Kit. Using BACS™ microbubble technology, the Human T Cell Selection, Activation, and 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.

## Why use Akadeum's T Cell Selection, Activation, and Expansion Kit?



Flexibility

Adaptable to existing workflows



Increased numbers

of highly activated effector T cell populations.



#### **GMP** grade

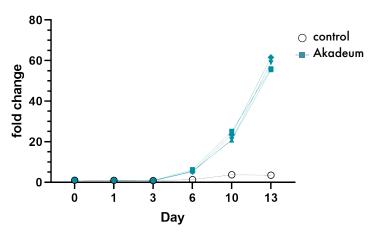
Our GMP grade allow you to have peace of mind, with stringent documentation and processes, traceability, and well-defined standard.

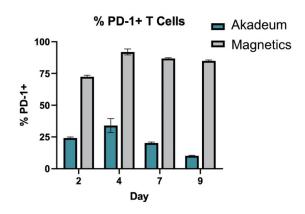


Highly Scalable

to fit your cell therapy workflow needs.

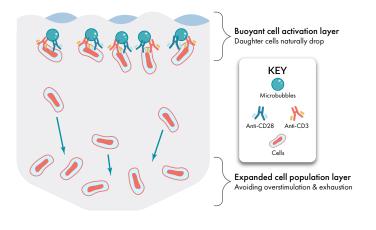
#### Microbubbles Produce Healthier Cells Faster





### How the Human T Cell Selection, Activation, and Expansion Kit Works:

Starting from leukopak material or PBMCs, T cells are labeled with biotinylated antibodies targeting CD3 and CD28. BACS<sup>TM</sup> Selection, Activation, and Expansion 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.



Fold Expansion greater than 80 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 Selection, Activation, and Expansion Kit

13310-224GMP800 Human T Cell Selection, Activation, and Expansion Kit - GMP