

# ActSep® CD3/CD28 Separation & Activation Magnetic Beads

T-cell separation and activation **in one**



**GMP grade**

**DMF filed: 038124**



**30%**

Manufacturing efficiency



**50%**

Simplified production processes

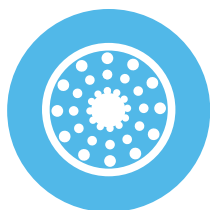


**70%**

Production costs

✓ Quick   ✓ Easy   ✓ Gentle   ✓ Efficient   ✓ Cost-saving

## Product Features



4.5um size particles



Flexible specifications



High stability and safety



Strict QC testing,  
traceability documentation



ISO9001 and  
ISO13485 certified

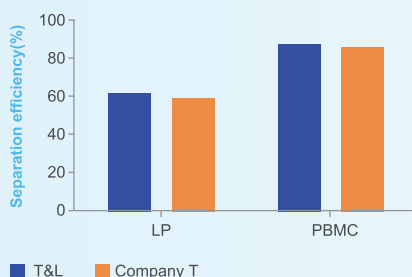


Production in class  
B+A clean area

## Product Features

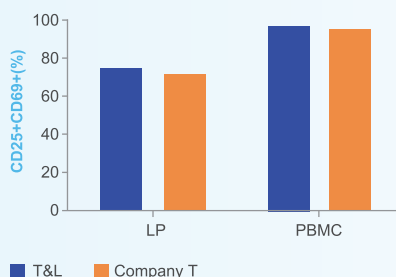
### High separation efficiency

#### Recovery



### Efficient activation of T cells

#### Activation of human T cells



### Efficient expansion of T cells

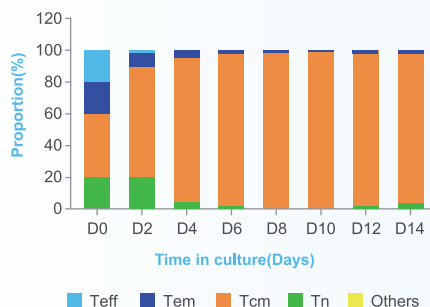
#### Fold Expansion



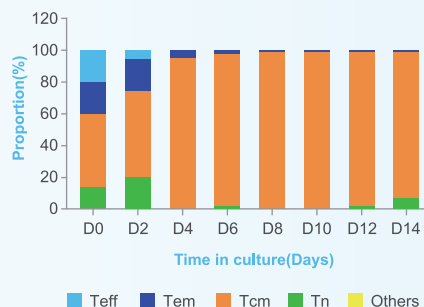
**Figure 1.** T cells were isolated from leukapheresis (LP) and peripheral blood mononuclear cell (PBMC) using ActSep®CD3/CD28 separation & activation magnetic beads at a ratio of 1:1 T-cell-to-beads(A), activation status of T cells after 48 hours of stimulation (B), and expansion in culture up to 14 days (C).

### T-cell phenotype

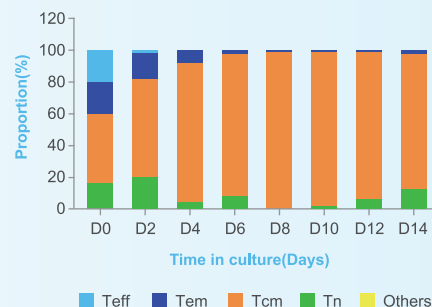
#### T Cell Subset-Donor1 PBMC



#### T Cell Subset-Donor2 PBMC



#### T Cell Subset-Donor3 PBMC



**Figure 2.** Changes in T cell phenotype. T cells were isolated from PBMC samples and cultured for 14 days using ActSep® CD3/CD28 separation & activation magnetic beads at a ratio of 1:1 T-cell-to-beads.

## Product Specification

Product Name	Size	Cat.No.	Concentration
ActSep® CD3/CD28 Separation & Activation Magnetic Beads	1mL	GMP-TL603-1000	2x10 <sup>8</sup> beads/mL
	5mL	GMP-TL603-5000	

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