



Dynabeads<sup>®</sup>

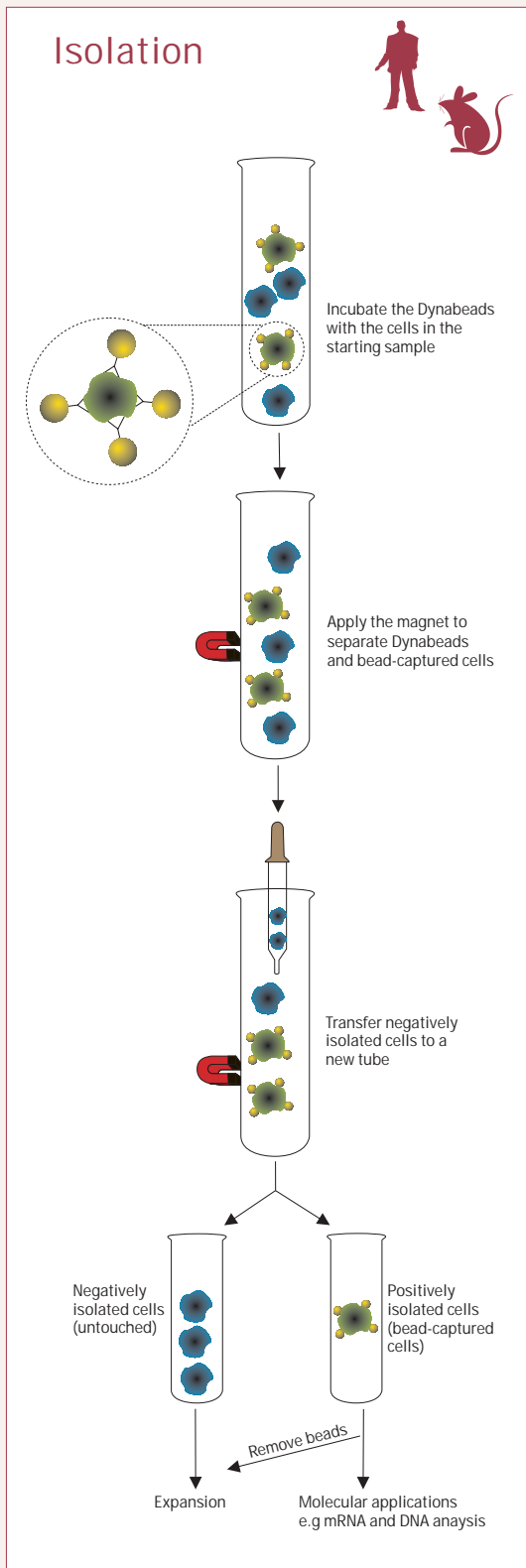
- Your First Choice for  
T Cell Research

The logo for DYNAL BIOTECH. It features a stylized white 'D' inside a black square on the left. To the right of the square, the word 'DYNAL' is written in a bold, white, sans-serif font. Below 'DYNAL', the word 'BIOTECH' is written in a smaller, white, sans-serif font, with horizontal lines above and below the letters.

[www.dynalbiotech.com](http://www.dynalbiotech.com)

# Dynabeads® – Your First Choice for

## Isolation and expansion



### T Cell Isolation - Simple, Efficient and Consistent

Human and mouse T cell isolation with Dynabeads® could not be easier. Add Dynabeads® to your starting sample, incubate and watch as the bead-captured target cells are pulled towards the tube wall by the handy magnet. You will get a high cell yield and viability, and as you do not need columns, you will have a full recovery of cells.

Whether or not you need bead-free T cells, Dynabeads® are always the best choice.

- Easy to use
- Consistent results
- No columns required
- High recovery and yield
- Viable and pure cells
- For human and mouse T cells
- Long shelf-life

### Choose your isolation strategy:

#### Positive Isolation of T Cells

As well as being the only magnetic isolation system to isolate human T cells directly from whole blood, you can isolate from any starting sample, including bone marrow or buffy coat. Mouse cells are separated from spleen, lymph node or thymus.

The supernatant is removed leaving a high yield of pure human or mouse T cells that are suitable for downstream molecular applications. With DETACHaBEAD®, you can remove the Dynabeads® from some cells and use antibody-free T cells for further culturing and flow cytometry.

#### T Cell Depletion

Perform as with positive isolation, but you discard the beads with the unwanted cells. A perfect strategy for removing activated human CD25<sup>+</sup> T cells.

# Human and Mouse T Cell Research

## Expansion you can rely on

### Untouched T Cells with Negative Isolation

Do you need a consistently high yield and purity of untouched human or mouse T cells? Use a Dynal® Negative Isolation Kit. Dynabeads® remove unwanted cells from a MNC starting sample to leave isolated, untouched T cells that are viable and thus perfect for culturing and flow cytometry. No columns are required, so T cells are not subjected to any stress.

### Antigen-specific CD8<sup>+</sup> T Cells

Isolate a high yield of human antigen-specific CD8<sup>+</sup> T cells with ready-to-use Dynabeads® Tcap™. These beads are coupled with recombinant HLA-A\*0201 molecules loaded with specific peptides. You can expand these viable cells in culture and use them for research into adoptive immunotherapy. Tcap™ is available for a range of viral and cancer antigens.

### Regulatory T Cells

For a high yield and purity of human bead-free regulatory T cells from MNC try the Dynal® CD4<sup>+</sup> CD25<sup>+</sup> T<sub>reg</sub> kit. You have the option to enrich the cells by depleting CD25<sup>+</sup>CD45RA<sup>+</sup> T cells.

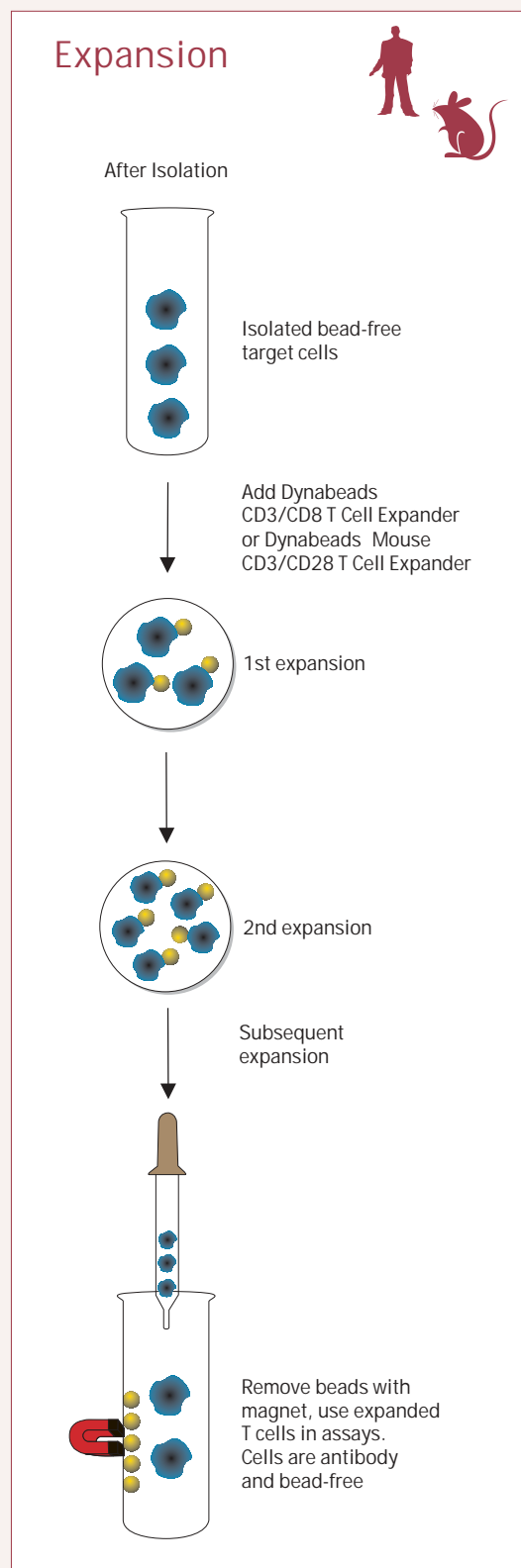
### Human and Mouse T Cell Expansion - Limit your Efforts

Tedious extraction of antigen-presenting cells for stimulation and expansion is now a thing of the past! Ready-to-use expander Dynabeads® offer the first artificial antigen-presenting cells to provide simultaneous signals to TCR/CD3 and CD28 for full activation and expansion of human or mouse T cells in culture.

T cells can be re-stimulated several times without maintaining cultures of antigen-presenting cells or feeder cells. The whole process is independent of antigen, gentle and efficient.

- Quick, easy and efficient
- No MNC/feeder cell contamination or maintenance
- Consistent simultaneous signalling
- No negative signalling through CTLA4
- Expanded cells are bead- and antibody-free
- Expanded cells are antigen-specific and cytotoxic
- Long shelf-life

For research use - not involving the generation of T cells for use in therapy.



## Ordering Information



www.dynalbiotech.com

### POSITIVE ISOLATION - For Cellular Applications (Bead-free)

**Human:** Dynal® CD4<sup>+</sup> CD25<sup>+</sup> Treg Kit  
Dynal® CD4 Positive Isolation Kit  
Dynal® CD8 Positive Isolation Kit  
Dynabeads® CD25  
DETACHaBEAD® CD4/CD8 (can be purchased separately)

**Mouse:** Dynabeads® Mouse CD4 (L3T4)  
DETACHaBEAD® Mouse CD4 (can be purchased separately)

### POSITIVE ISOLATION - For Molecular Applications (With beads)

**Human:** Dynabeads® M-450 CD2  
Dynabeads® M-450 CD3  
Dynabeads® M-450 CD4  
Dynabeads® M-450 CD8  
Dynabeads® CD25

**Human Antigen-Specific  
CD8<sup>+</sup> T Cells:** Dynabeads® Tcap™ HLA-A\*0201 EBV/BMLF-1  
Dynabeads® Tcap™ HLA-A\*0201 EBV/LMP-2  
Dynabeads® Tcap™ HLA-A\*0201 CMV/pp65  
Dynabeads® Tcap™ HLA-A\*0201 HER-2/neu  
Dynabeads® Tcap™ HLA-A\*0201 MART-1  
Dynabeads® Tcap™ HLA-A\*0201 gp100 (209-2M)  
Dynabeads® Tcap™ HLA-A\*0201 hTERT

**Mouse:** Dynabeads® Mouse pan T (Thy1.2)  
Dynabeads® Mouse CD8 (Ly-2)  
Dynabeads® Mouse CD4 (L3T4)

### DEPLETION

**Human:** Dynabeads® M-450 CD2  
Dynabeads® M-450 CD3  
Dynabeads® M-450 CD4  
Dynabeads® M-450 CD8  
Dynabeads® CD25

**Mouse:** Dynabeads® Mouse pan T (Thy1.2)  
Dynabeads® Mouse CD4 (L3T4)  
Dynabeads® Mouse CD8 (Ly-2)

### NEGATIVE ISOLATION

**Human:** Dynal® T Cell Negative Isolation Kit  
Dynal® CD4 Negative Isolation Kit  
Dynal® CD8 Negative Isolation Kit

**Mouse:** Dynal® Mouse T Cell Negative Isolation Kit  
Dynal® Mouse CD4 Negative Isolation Kit  
Dynal® Mouse CD8 Negative Isolation Kit

### EXPANSION

**Human:** Dynabeads® CD3/CD28 T Cell Expander

**Mouse:** Dynabeads® Mouse CD3/CD28 T Cell Expander

If you cannot find the product you are looking for, we have a range of Dynabeads® to which you can add your own antibody - see our website for more details on these, as well as new product releases.

Dynal Biotech will not be responsible for violations or patent infringements that may occur with the use of our products.

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