

T cell activation/expansion product guide

Expand your capabilities

Dynabeads® T cell expansion technology mimics *in vivo* activation and expansion. Our superior T cell activation and expansion tools are available for basic and clinical research involving human or mouse T cells. Find the ideal tool for your application at www.invitrogen.com/cellisolation.

Product	Species	Ab clones	Features			Recommended starting sample					For activation/expansion of					Cat. no.	Notes
			Isolation	Activation	Expansion	Leukopheresis product/elutriation	MNC/PBMC from whole blood or buffy coat	CD3 ⁺ T cells, CD4 ⁺ or CD8 ⁺ T cell subsets, Treg cells, T cell clones	CD3 ⁺ T cells	Naive T cells	Activated T cells (CD4 ⁺ or CD8 ⁺)	T cell clones (CD4 ⁺ or CD8 ⁺)	Memory T cells (CD4 ⁺ or CD8 ⁺)	Treg cells (CD4 ⁺)			
Dynabeads® Mouse CD3/CD28 T Cell Expander	Mouse			●	●		●	●	●	●	●	●	●	○	114.52D (2 ml), 114.53D (10 ml)		
Dynabeads® CD3/CD28 T Cell Expander	Human			●	●		●	●	●	●	●	●	●	●	111.31D (2 ml), 111.32D (10 ml)	Ideal for expansion of antigen-specific T cells (research use)	
Dynabeads® Human Treg Expander Kit	Human			●	●									●	111.29D (2 ml)	Optimized to retain suppressive phenotype and capacity in expansion of Treg cells	
Dynabeads® CD3/CD28	Human		● ¹	● ²	●	●	●	●	●	●	●	● ³		○	○	111.41D (10 ml)	The research version of Dynabeads® <i>ClinExVivo</i> [™] CD3/CD28; intended for preclinical research applications
Dynabeads® <i>ClinExVivo</i> [™] CD3/CD28	Human		● ¹	● ²	●	●	●	●	●	●	●	● ³		○	○	402.03D (10 ml)	Intended for clinical research applications

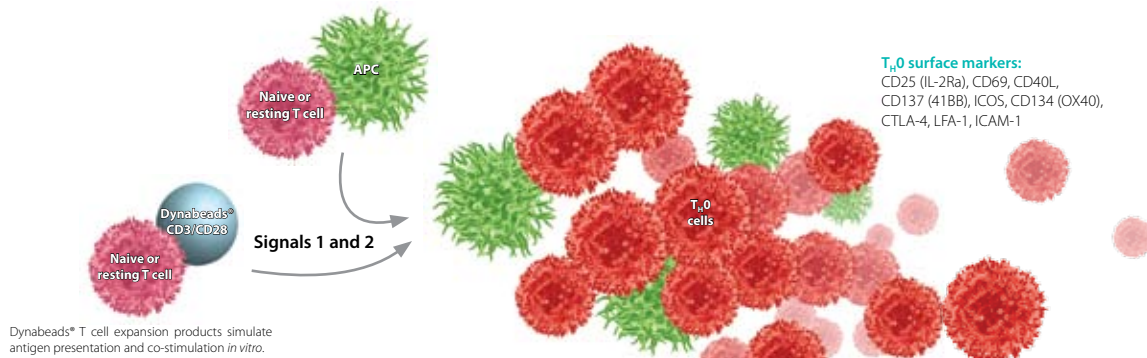
● See product package insert or visit www.invitrogen.com/cellisolation for protocols and references.
○ Unpublished data.

1. Bonyhadi, M. et al. (2005) *J Immunol* 174:2366.

2. Coito, S. et al. (2004) *Stem Cells Dev* 13:71.

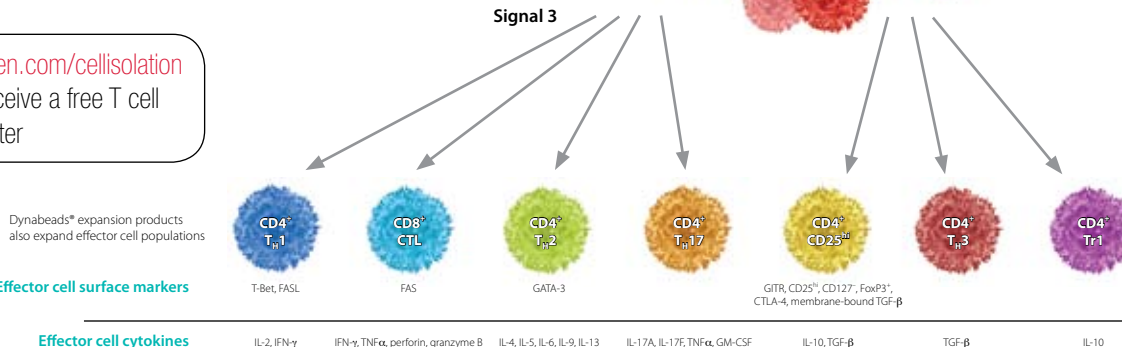
3. Kalamasz, D. et al. (2004) *J Immunother* 27:405.

Dynabeads® T cell activation and expansion



T_H0 surface markers:
 CD25 (IL-2Ra), CD69, CD40L,
 CD137 (41BB), ICOS, CD134 (OX40),
 CTLA-4, LFA-1, ICAM-1

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 differentiation poster



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 invitrogen bead separations