

Dynabeads® Pan Mouse IgG

Universal secondary Dynabeads® for use with any mouse IgG subclass

- Build your own system for positive or negative isolation of cells

Dynabeads® Pan Mouse IgG - the universal secondary bead

- Bind any mouse IgG subclass
- Fc-specific binding of mouse IgG
- No cross-reactivity with IgGs from other species
- High reproducibility
- Can be used directly in whole blood, bone marrow, MNC suspensions or tissue digests.

As Dynabeads® Pan Mouse IgG bind all subclasses of mouse IgG via the Fc-region, only one secondary bead is required regardless of the mouse IgG used. As the affinity for primary antibodies is high, less mouse IgG is required, so costs are reduced (table 1).

Principle of Isolation

The primary mouse IgG antibody is either added to the cell sample (indirect technique) or pre-coated onto the beads (direct technique) prior to cell isolation. Dynabeads® are then mixed with the cell sample in a tube. The Dynabeads® will bind to the target cells during a short incubation, and then the bead-bound cells are separated by a magnet (see fig. 1)

- **Positive isolation** - discard the supernatant and use the bead-bound cells for downstream applications (e.g. molecular analysis or cell culture).
- **Depletion** - discard the bead-bound cells and use the remaining, untouched cells for any application.

Product Description

Dynabeads® Pan Mouse IgG are uniform, superparamagnetic polystyrene beads (4.5 µm diameter) coated with a monoclonal human anti-mouse IgG antibody. The antibody coated onto Dynabeads® recognises all mouse IgG subclasses and is Fc specific. The Pan Mouse IgG antibody does not cross-react with human, rat, rabbit, guinea pigs, sheep, goat or hamster IgG.

Uses

Dynabeads® Pan Mouse IgG offer all the proven benefits of Dynabeads® magnetic separation. The simple tube-based method ensures the highest yield, purity and viability of isolated cells.

Negative isolation of cells:

- Use Dynabeads® Pan Mouse IgG to deplete unwanted cells (fig. 3).
- Deplete single or multiple populations simultaneously.
- Negatively isolated target cells are untouched and free of surface-bound antibodies and beads.
- Target cells can be used in any application.
- Use 2×10^7 (50 µl) beads per ml sample to achieve up to 100% depletion (see fig. 2).

Positive isolation of cells:

- The beads can be used directly in whole blood, bone marrow, MNC suspensions or tissue digests.
- Consistent bead quality gives consistent results.
- Use Dynabeads® Pan Mouse IgG to bind and isolate target cells.
- Cells can be used with beads attached for molecular analysis.
- High purity and yield of target cells.
- Use 1×10^7 (25 µl) beads per ml sample to isolate up to 95% of cells.

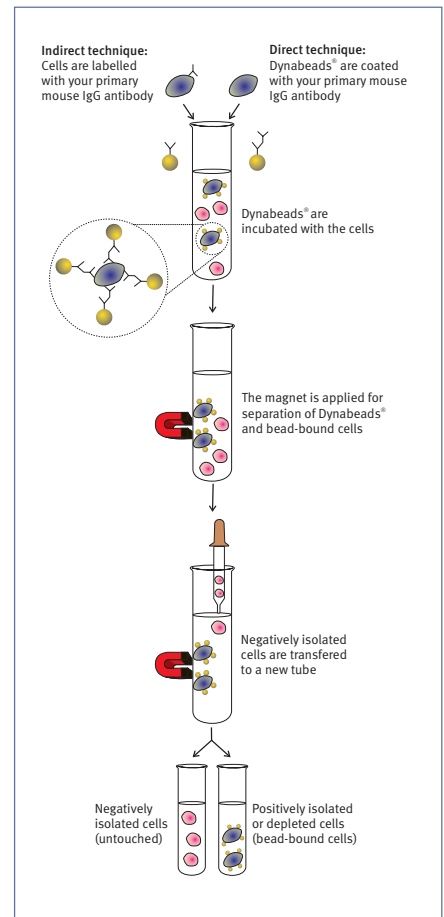


Fig. 1. Method

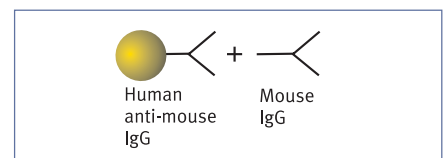


Fig. 2. Dynabeads® Pan Mouse IgG

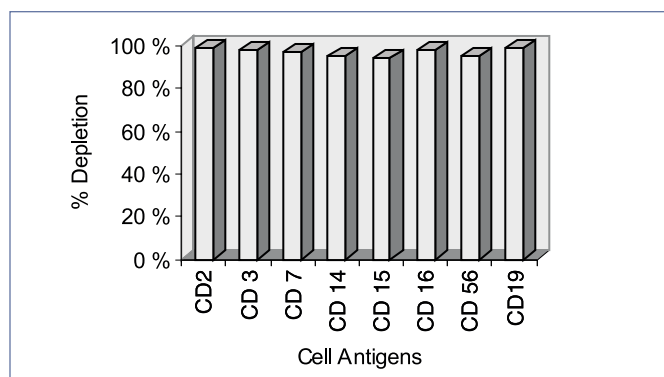


Fig. 3. Cell depletions from MNC samples. Cell depletions were performed using a cocktail of antibodies and Dynabeads® Pan Mouse IgG. Results shown are the average depletions from 10 experiments.

The Universal Secondary Bead

- Monoclonal consistency with the broad binding of a polyclonal.
- Cost efficient system, requiring less primary antibody.
- Optimal binding of primary antibody and optimal orientation as the Fc portion is bound to the secondary antibody.

Positive Isolation and Detachment

If release of cells from beads is required, use the CELLection™ Pan Mouse IgG Kit. These CELLection™ Dynabeads® share the same primary antibody binding features of Dynabeads® Pan Mouse IgG, but the kit includes a universal detachment system for bead-free cells.

Dynabeads® Pan Mouse IgG	Dynabeads® SAM IgG	Dynabeads® GAM IgG
Human anti-mouse	Sheep anti-mouse	Goat anti-mouse
Monoclonal	Polyclonal	Polyclonal
<ul style="list-style-type: none"> • Binds all mouse IgG subclasses • Fc specific • No interspecies cross reactivity 	<ul style="list-style-type: none"> • Binds mouse IgG1, IgG2a and IgG2b (NOT IgG3) • Fc reactive 	<ul style="list-style-type: none"> • Fc reactive • Binds all mouse IgG subclasses (low IgG3)
Use 0.1-1 µg Ab per 25 µl beads	Use 0.15-1.5 µg Ab per 25 µl beads	Use 0.3-1.5 µg Ab per 25 µl beads

Table 1. Comparison of different secondary anti-mouse IgG coated Dynabeads®.

References

1. Lee E *et al* (2004) Increased expression of Interleukin 23 p19 and p40 in lesional skin of patients with Psoriasis Vulgaris. *J. Exp. Med.* 199(1): 125-130.
2. Llewelyn M *et al* (2004) HLA Class II polymorphisms determine responses to bacterial superantigens. *J. Immunol.* 172: 1719-1726.
3. Morelli A *et al* (2004) Endocytosis, intracellular sorting and processing of exosomes by dendritic cells. *Blood* 104: 3257-3266.
4. Woywodt A *et al* (2004) Counting the cost: markers of endothelial damage in hematopoietic stem cell transplantation. *Bone Marrow Transplantation* 34: 1015-1023.

Ordering information

Product

Dynabeads® Pan Mouse IgG
Supplied at 4 x 10⁸ beads/ml

Volume

5 ml
5 x 5 ml

Product No.

110.41
110.42

CELLection™ Pan Mouse IgG Kit

Supplied as CELLection™ Dynabeads® plus Releasing Buffer

5 ml

115.31

Dynal MPC®-S

Dynal MPC®-L

Dynal MPC®-15

Dynal MPC®-50

20 µl - 2 ml

1 ml - 8 ml

1 ml - 15 ml

15 ml - 50 ml

120.20

120.21

120.29

120.24

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



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