

BD Lyoplate™ Screening Panels

Human Cell Surface Markers/Mouse Cell Surface Markers

Features

Support the efficient, cost-effective profiling of hundreds of cell surface markers with purified antibodies, isotype controls, and detection reagents

Proprietary lyophilized format enables long-term room temperature storage

Convenient 96-well plate-based format for automated processing

Expandable panel design provides open wells for additional biomarkers or positive controls

Alexa Fluor® 647–conjugated detection reagents are compatible with green fluorescent protein (GFP) and yellow fluorescent protein (YFP) expressing cells



BD Lyoplate™ screening panels are the first comprehensive systems available for the efficient profiling of hundreds of murine and human cell surface markers by flow cytometry or bioimaging. Deciphering the cell surface proteome (eg, of differentiating stem cells) will enable researchers to define strategies for the analysis and isolation of targeted cells from heterogeneous populations for functional studies, drug discovery research, in vivo animal studies, and cell therapy research.

A cost-effective profile of cell surface proteins

With hundreds of monoclonal antibodies (mAbs) in each panel, BD Lyoplate cell surface marker screening panels provide one of the most cost-effective screening tools available for immunophenotyping tissues and individual, intact live and fixed cells. To simplify the transition to more targeted, scaled up experiments, all antibodies included in the screening panels are available in the BD Biosciences catalog as single-vial, unlabeled, or conjugated formats tested for a variety of applications, as well as in custom sizes and fluorochromes.

Simplify workflow

Each panel contains three plates. Each well contains lyophilized, purified antibody to one cell surface marker or isotype control. Following reconstitution, the antibody is incubated with cellular samples and then with the detection reagents included with the BD Lyoplate screening panel. Finally, samples are analyzed by flow cytometry or imaging. To provide flexibility while simplifying workflow, open wells allow for the panel to be expanded to include additional markers.

Accelerate discovery

Easy-to-use Microsoft® Excel® 2007 templates are available to organize FCS file data into a 96-well array format overlaid with the corresponding plate map (Figures 1 and 2). The templates are used to perform normalization to isotype controls and generate heatmaps illustrating the mean fluorescence intensity (MFI) or percentage of positive cells for each biomarker. Side-by-side comparative analyses of multiple screens (eg, cells in various states of differentiation or culture conditions) enable the identification of unique cell surface marker expression signatures that permit the characterization and isolation of distinct cell populations from heterogeneous samples for downstream applications.

A convenient format for greater productivity and stability

The plate-based format is compatible with automation and multichannel pipetting, helping to reduce hands-on time and offering improved lab productivity. The proprietary lyophilized format offers at least two years of stability of the air-tight packaged plates at room temperature, saving space in refrigerated storage.

Custom solutions

The BD Custom Technology Team (CTT) offers custom BD Lyoplate™ technology as a unique product option for researchers looking for greater lab-to-lab consistency and less hands-on time. The lyophilized products are uniquely suited for multi-site or longitudinal flow cytometry and bioimaging studies. Designed for specific experiment requirements, custom lyophilized products can include antibodies, antibody conjugates, peptides, and control cells. Lyophilized products can be packaged in many formats such as tubes, 96-well plates, and single vials. CTT solutions can also expand beyond typical offerings to essential resources such as protocol development, flexible delivery options, and quality documentation.

Visit bdbiosciences.com/stemcell for more information, or for custom BD Lyoplate solutions visit bdbiosciences.com/ctt.

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BD Lyoplate™ Screening Panels Human and Mouse Cell Surface Markers

Figure 1. Array layout of the BD Lyoplate Human Cell Surface Marker Screening Panel.

Plate 1

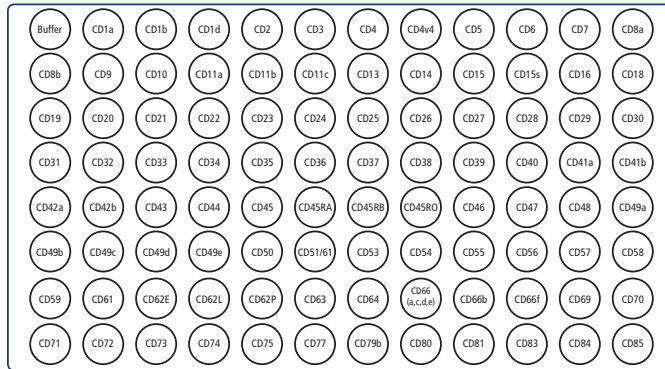


Plate 2

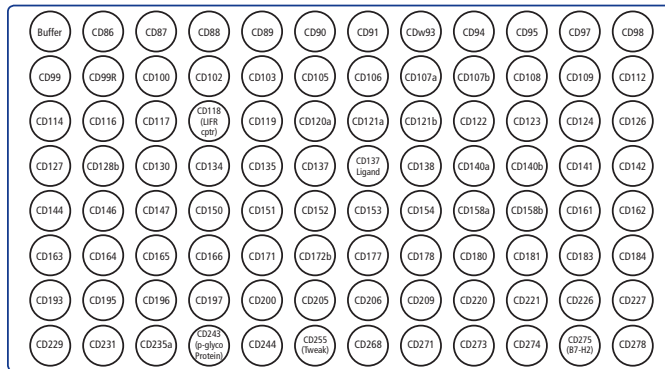


Plate 3

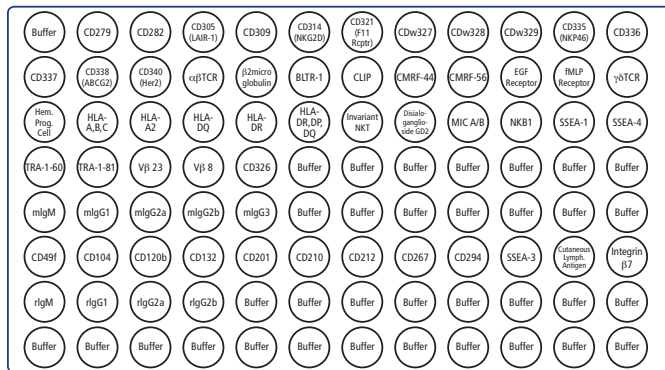


Figure 2. Array layout of the BD Lyoplate Mouse Cell Surface Marker Screening Panel.

Plate 1

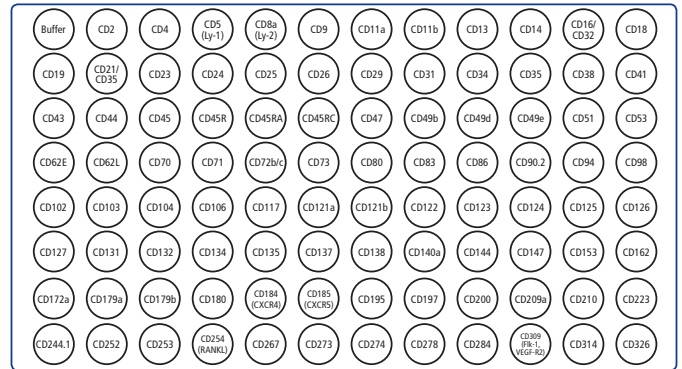


Plate 2

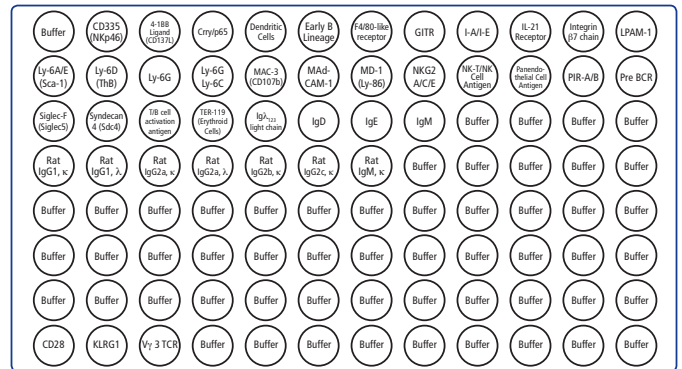
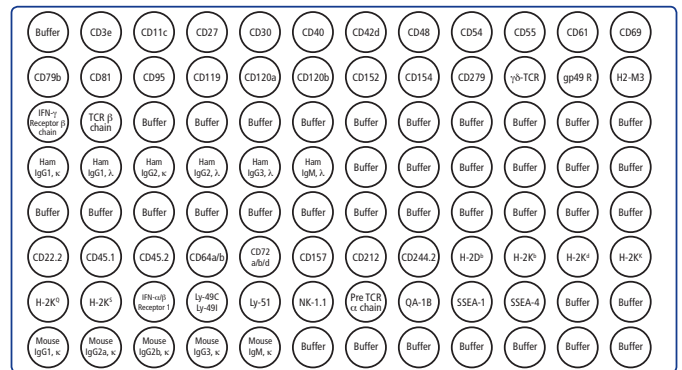


Plate 3



Ordering Information

| Description | Format | Size | Cat. No. |
|---|------------------|---------|---------------|
| BD Lyoplate Human Cell Surface Marker Screening Panel Contents: 242 human cell surface markers and 9 isotype controls (5 tests of each lyophilized purified mAb per well) Alexa Fluor® 647–conjugated goat anti-mouse Ig and goat anti-rat Ig detection reagents | Alexa Fluor® 647 | 5 tests | 560747 |
| BD Lyoplate Mouse Cell Surface Marker Screening Panel Contents: 176 mouse cell surface markers and 18 isotype controls (5 tests of each lyophilized purified mAb per well) Biotinylated goat anti-mouse, anti-rat, anti-Armenian hamster, and anti-Syrian hamster second steps Streptavidin Alexa Fluor® 647 detection reagent | Alexa Fluor® 647 | 5 tests | 562208 |

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