

## Technical Data Sheet

## PE-Cy™7 Mouse IgG2a, κ Isotype Control

## Product Information

|                  |                                                           |
|------------------|-----------------------------------------------------------|
| Material Number: | 552868                                                    |
| Size:            | 0.1 mg                                                    |
| Concentration:   | 0.2 mg/ml                                                 |
| Clone:           | G155-178                                                  |
| Immunogen:       | TNP-keyhole limpet hemocyanin                             |
| Isotype:         | Mouse (BALB/c) IgG2a, κ                                   |
| Storage Buffer:  | Aqueous buffered solution containing ≤0.09% sodium azide. |

## Description

The G155-178 clone has an unknown specificity. Trinitrophenol (TNP), the immunogen, is a hapten not expressed on human, mouse, rat or non-human primate cells. In the absence of specific binding, this antibody may bind non-specifically to immunoglobulin Fc receptors. The immunoglobulin secreted by the G155-178 hybridoma was selected as an mouse IgG2a, κ isotype control following screening for low background binding on a variety of mouse and human tissues.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with PE-Cy7 under optimum conditions, and unconjugated antibody and free PE-Cy7 were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

|                                         |                  |
|-----------------------------------------|------------------|
| Flow cytometry                          | Routinely Tested |
| Isotype control                         | Routinely Tested |
| Intracellular staining (flow cytometry) | Not Recommended  |
| Immunohistochemistry                    | Not Recommended  |

## Recommended Assay Procedure:

An isotype control should be used at the same concentrations as the antibody of interest (e.g., ≤1 µg/million cells for flow cytometry).

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Warning: Some APC-Cy7 and PE-Cy7 conjugates show changes in their emission spectrum with prolonged exposure to formaldehyde. If you are unable to analyze fixed samples within four hours, we recommend that you use BD™ Stabilizing Fixative (Cat. No. 338036).
4. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
5. PE-Cy7 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by 488-nm light and serves as an energy donor, coupled to the cyanine dye Cy7, which acts as an energy acceptor and fluoresces maximally at 780 nm. PE-Cy7 tandem fluorochrome emission is collected in a detector for fluorescence wavelengths of 750 nm and higher. Although every effort is made to minimize the lot-to-lot variation in the efficiency of the fluorochrome energy transfer, differences in the residual emission from PE may be observed. Therefore, we recommend that individual compensation controls be performed for every PE-Cy7 conjugate. PE-Cy7 is optimized for use with a single argon ion laser emitting 488-nm light, and there is no significant overlap between PE-Cy7 and FITC emission spectra. When using dual-laser cytometers, which may directly excite both PE and Cy7, we recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
7. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
8. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
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## References

Roederer M, Kantor AB, Parks DR, Herzenberg LA. Cy7PE and Cy7APC: bright new probes for immunofluorescence. *Cytometry*. 1996; 24(3):191-197. (Methodology)