

## Technical Data Sheet

APC-Cy7™ Rat IgG1,  $\lambda$  Isotype Control

## Product Information

|                  |                                                                  |
|------------------|------------------------------------------------------------------|
| Material Number: | 557663                                                           |
| Size:            | 0.1 mg                                                           |
| Concentration:   | 0.2 mg/ml                                                        |
| Clone:           | A110-1                                                           |
| Immunogen:       | Trinitrophenal-KLH                                               |
| Isotype:         | Rat (LOU) IgG1, $\lambda$                                        |
| Storage Buffer:  | Aqueous buffered solution containing $\leq 0.09\%$ sodium azide. |

## Description

The A110-1 clone has an unknown specificity. Trinitrophenal (TNP), the immunogen, is a hapten not expressed on human, mouse, or rat cells. In the absence of specific binding, this antibody may bind non-specifically to Fc receptors. The immunoglobulin from clone A110-1 was selected as an isotype control following screening for low background on a variety of mouse and rat tissues.

## Preparation and Storage

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

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

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

## Application Notes

## Application

|                 |                  |
|-----------------|------------------|
| Flow cytometry  | Routinely Tested |
| Isotype control | Routinely Tested |

## Recommended Assay Procedure:

An isotype control should be used at the same concentration as the antibody of interest (e.g.,  $\leq 1$   $\mu$ g/million cells for flow cytometry).

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. APC-Cy7 is a tandem fluorochrome composed of Allophycocyanin (APC), which is excited by laser lines between 595 and 647 nm and serves as an energy donor, coupled to the cyanine dye Cy7™, which acts as an energy acceptor and fluoresces at 780 nm. BD Biosciences Pharmingen has maximized the fluorochrome energy transfer in APC-Cy7, thus maximizing its fluorescence emission intensity, minimizing residual emission from APC, and minimizing required electronic compensation in multilaser-laser flow cytometry systems. Note: Although every effort is made to minimize the lot-to-lot variation in residual emission from APC, it is strongly recommended that every lot be tested for differences in the amount of compensation required and that individual compensation controls are run for each APC-Cy7 conjugate.
3. APC-Cy7 tandem fluorochrome emission is collected in a detector for fluorescence wavelengths of 750 nm and higher.
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. 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).
6. 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.
7. 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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9. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
10. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

Beavis AJ, Pennline KJ. Allo-7: a new fluorescent tandem dye for use in flow cytometry. *Cytometry*. 1996; 24(4):390-395. (Methodology)  
 Roederer M, Kantor AB, Parks DR, Herzenberg LA. Cy7PE and Cy7APC: bright new probes for immunofluorescence. *Cytometry*. 1996; 24(3):191-197. (Methodology)

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