

## Technical Data Sheet

PerCP Mouse IgG1  $\kappa$  Isotype Control

## Product Information

Material Number:	550672
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	MOPC-31C
Isotype:	Mouse (BALB/c) IgG1, $\kappa$
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The MOPC-31C antibody has unknown specificity. The transplantable plasmacytoma MOPC-31C was induced by intraperitoneal injection of mineral oils into BALB/c mice. It was adapted to continuous cell culture by alternate passage in animals.

## Preparation and Storage

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

The antibody was conjugated with PerCP under optimum conditions, and unconjugated antibody and free PerCP were removed. Storage of PerCP conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

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

## Recommended Assay Procedure:

An isotype control should be used at the same concentration as the antibody of interest (e.g.,  $\leq 1$   $\mu\text{g}$ /million cells for flow cytometry). We recommend PerCP-conjugated mouse IgG1  $\kappa$  mAb MOPC-21 (Cat. No. 559425) for immunofluorescent staining of non-human primate cells.

For tandem conjugates incorporating PerCP (e.g., PerCP-Cy5.5), the excitation and emission properties of PerCP and the kinetics of energy exchange between the fluorochromes of the tandem dye limit their effectiveness on high-speed and/or sorting flow cytometers. Therefore, for third-color flow-cytometric analysis using  $\geq 25$ -mW laser power, we recommend PE-Cy5 (formerly BD Cy-Chrome.) conjugated reagents (e.g., Cat. no. 550618).

## 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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
4. PerCP is a photosynthetic accessory pigment from Glenodinium species of dinoflagellates, which is excited by the 488-nm light of an Argon ion laser and fluoresces at 675 nm. Therefore, PerCP-labelled antibodies can be used with FITC- and R-PE-labelled reagents in most single-laser flow cytometers with no significant spectral overlap of PerCP fluorescence with that of FITC or R-PE. PerCP has been reported to undergo significant photobleaching, the magnitude of which increases as laser power is increased or beam focus is narrowed. For third-color flow-cytometric analysis using  $\geq 25$ -mW laser power, we recommend PE-Cy5-, PE-Cy7-, or PerCP-Cy5.5-conjugated reagents.
5. 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.

## References

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Hay R, Caputo J, Chen TR, Macy M, McClintock P, Reid Y, ed. *ATCC. Cell Lines and Hybridomas, Eighth Edition.* 1994:75. (Clone-specific)

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Waggoner AS, Ernst LA, Chen CH, Rechtenwald DJ. PE-CY5. A new fluorescent antibody label for three-color flow cytometry with a single laser. *Ann N Y Acad Sci.* 1993; 677:185-193. (Methodology: Flow cytometry)

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