TECHNICAL DATA SHEET

CyFlow™ IgG2a Biotin
Mouse Isotype Control

REF **BH298720**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	IgG2a Isotype Control
Alternative Names	—
Clone	MOPC-173
Clonality	monoclonal
Format	Biotin
Host / Isotype	Mouse / IgG2a
Species Reactivity	n/a
Negative Species Reactivity	Human | Mouse | Rat
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	The transplantable plasmacytoma MOPC-173 was induced by intraperitoneal injection of mineral oils into BALB/c mice

Specificity

This mouse IgG2a monoclonal antibody (clone MOPC-173) reacts with an unknown epitope. It does not react with a variety of resting, activated, live, and fixed mouse, rat and human tissues.

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Application

The reagent is designed as an isotype control for Flow Cytometry analysis. To establish the amount of non-specific antibody binding, match the concentration of the correct isotype to the recommended working concentration of the antigen-specific antibody. If the background signal of the isotype control is too high (usually when working antibody concentrations are above 10 µg/ml of incubation mixture), change the experimental conditions to reduce the background.
Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

The specificity of staining by monoclonal antibodies to target antigens should be verified by establishing the amount of non-specific antibody binding. Especially at higher concentration (more than 15 µ/ml) the antibody staining usually has consignable background. To this end a non-reactive immunoglobulin of the same isotype is included as a negative control for each specific monoclonal antibody used in a particular immunoassay. The monoclonal antibody MOPC-173, generated against an undefined antigen, does not react specifically with mouse, rat and human samples, and hence all the background that could be observed when working with this antibody would be a result of general nonspecific interactions between an mouse IgG2a molecule and the respective sample under the particular conditions. This shall help the customer to set up the experimental conditions so that the nonspecific binding of any antibody is abolished.

References

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- Fougereau M, Bourgois A, de Preval C, Rocca-Serra J, Schiff C: The complete sequence of the murine monoclonal immunoglobulin MOPC 173 (IgG2a): genetic implications. Ann Immunol (Paris). 1976 Sep-Oct; 127(5):607-31. < PMID: 984731 >
- Gupta V, Gylling A, Alonso JL, Sugimori T, Ianakiev P, Xiong JP, Arnaout MA: The beta-tail domain (betaTD) regulates physiologic ligand binding to integrin CD11b/CD18. Blood. 2007 Apr 15; 109(8):3513-20. < PMID: 17170130 >
- Khoddami V, Cairns BR: Transcriptome-wide target profiling of RNA cytosine methyltransferases using the mechanism-based enrichment procedure Aza-IP. Nat Protoc. 2014 Feb; 9(2):337-61. < PMID: 24434802 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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