



Datasheet for ABIN2749153

## Mouse IgG2a isotype control (APC)

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### Overview

Quantity:	0.1 mg
Target:	IgG2a
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	APC
Application:	Flow Cytometry (FACS), Immunohistochemistry (IHC), Western Blotting (WB), Immunoprecipitation (IP), Immunocytochemistry (ICC), Negative Control (NC)

### Product Details

Immunogen:	The transplantable plasmacytoma MOPC-173 was induced by intraperitoneal injection of mineral oils into BALB/c mice.
Clone:	MOPC-173
Isotype:	IgG2a
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.
No Cross-Reactivity:	Human, Mouse (Murine), Rat (Rattus)

### Target Details

Target:	IgG2a
Abstract:	<a href="#">IgG2a Products</a>
Target Type:	Antibody

## Target Details

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**Background:** 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 µg/mL) the antibody staining usually has considerable 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.

## Application Details

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**Application Notes:** The reagent is intended as isotype control for flow cytometry analysis to establish the amount of non-specific antibody binding. For your particular experiment, use the same concentration of this isotype control antibody as the recommended working concentration of the antigen-specific antibody. Also, when working with prediluted antibodies, dilute the isotype control to the same concentration as is the concentration of the antigen-specific antibody in the prediluted antibody solution you are using. If under particular experimental conditions the background signal of the isotype control is too high (usually when working concentrations of used antibodies are above 10 µg per ml of incubation mixture), change the conditions of your experiment to reduce the background.

**Comment:** The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.

**Restrictions:** For Research Use only

## Handling

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**Buffer:** The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide.

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

**Storage:** 4 °C

## Handling

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

## Publications

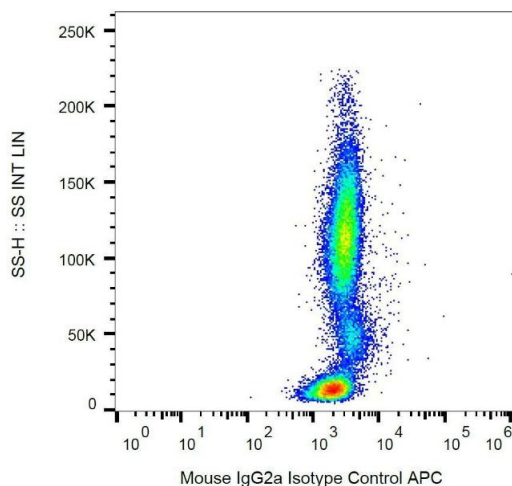
Product cited in: Khoddami, Cairns: "Transcriptome-wide target profiling of RNA cytosine methyltransferases using the mechanism-based enrichment procedure Aza-IP." in: **Nature protocols**, Vol. 9, Issue 2, pp. 337-61, (2014) ([PubMed](#)).

Gupta, Gylling, Alonso, Sugimori, Ianakiev, Xiong, Arnaout: "The beta-tail domain (betaTD) regulates physiologic ligand binding to integrin CD11b/CD18." in: **Blood**, Vol. 109, Issue 8, pp. 3513-20, (2007) ([PubMed](#)).

Fougereau, Bourgois, de Preval, Rocca-Serra, Schiff: "The complete sequence of the murine monoclonal immunoglobulin MOPC 173 (IgG2a): genetic implications." in: **Annales d'immunologie**, Vol. 127, Issue 5, pp. 607-31, (1977) ([PubMed](#)).

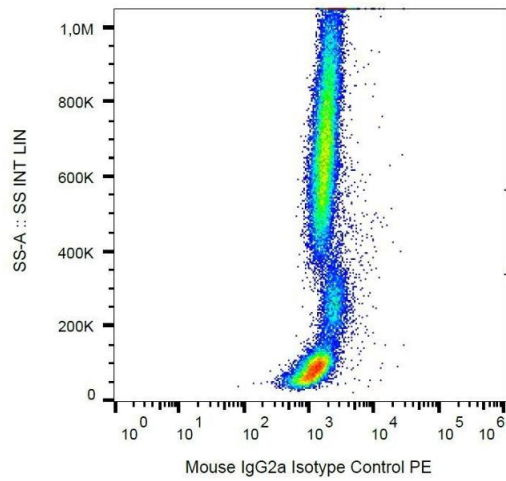
Baumal, Scharff: "Immunoglobulin biosynthesis by the MOPC 173 mouse myeloma tumor and a variant spleen clone." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 116, Issue 1, pp. 65-74, (1976) ([PubMed](#)).

## Validation report #104459 for Immunohistochemistry (IHC)



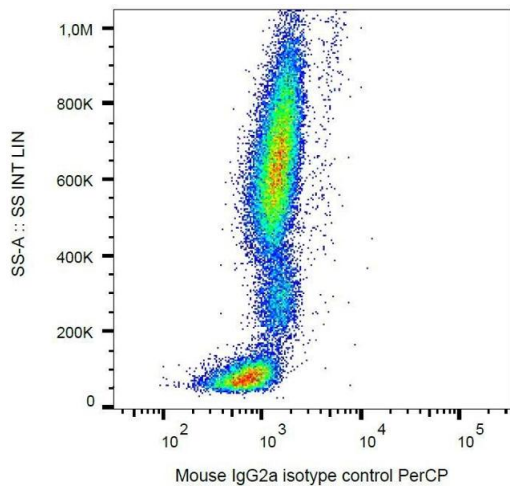
### Flow Cytometry

**Image 1.** Example of nonspecific mouse IgG2a (MOPC-173) APC signal on human peripheral blood; surface staining, 9  $\mu$ g/ml.



### Flow Cytometry

**Image 2.** Example of nonspecific mouse IgG2a (MOPC-173) APC signal on human peripheral blood; surface staining, 9  $\mu$ g/ml.



### Flow Cytometry

**Image 3.** Example of nonspecific mouse IgG2a (MOPC-173) APC signal on human peripheral blood; surface staining, 9  $\mu$ g/ml.