

Mouse IgG2a - FITC

Catalog No.: AM26775FC-N

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

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.

Host / Isotype: Mouse / IgG2a

Clone: MOPC-173

Immunogen: Mineral oils

Format: **State:** Liquid purified Ig fraction
Buffer System: Phosphate buffered saline (PBS)
Preservatives: 15 mM sodium azide, approx. pH 7.4
Label: FITC – Conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC.

Applications: 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. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody reacts with an unknown epitope. It does not react with a variety of resting, activated, live, and fixed mouse, rat and human tissues.

Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General Readings:

1. 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. PubMed PMID: 984731.
2. Baumal R, Scharff MD. Immunoglobulin biosynthesis by the MOPC 173 mouse myeloma tumor and a variant spleen clone. *J Immunol*. 1976 Jan;116(1):65-74. PubMed PMID: 812916.
3. Gupta V, Gylling A, Alonso JL, Sugimori T, Ianakiev P, Xiong JP, et al. The beta-tail domain (betaTD) regulates physiologic ligand binding to integrin CD11b/CD18. *Blood*. 2007 Apr 15;109(8):3513-20. Epub 2006 Dec 14. PubMed PMID: 17170130.
4. 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. doi: 10.1038/nprot.2014.014. Epub 2014 Jan 16. PubMed PMID: 24434802.