XEF540

Mouse IgG2a Isotype Control Allophycocyanin (APC) conjugated

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 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.

Cat#: **EXF540 (100 µg)**

Clone: MOPC-173

Isotype: Mouse 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.

Immunogen: The transplantable plasmacytoma MOPC-173 was induced by intraperitoneal injection of mineral oils into BALB/c mice.

Negative Species: Human, Mouse, Rat

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

Concentration: 1mg/ml

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

Usage: 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.

Storage/ Stability: 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.

References:

*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.
*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.
*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.
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*And many other.

For in vitro research use only