

091500

Mouse IgG1 isotype control 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 $15~\mu g/ml$) 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-21, generated against an undefined antigen, does not react specifically with 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 IgG1 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# 091500

Clone MOPC-21

Isotype Mouse IgG1

Specificity This mouse IgG1 kappa monoclonal antibody (clone MOPC-21) has unknown

specificity and was chosen as an isotype control after screening on variety of

resting, activated, live and fixed rat and human tissues.

Negative Species Human, Rat

Preparation The purified antibody is conjugated with cross-linked Allophycocyanin (APC)

under optimum conditions. The conjugate is purified by size-exclusion

chromatography.

Concentration 0.1 mg/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.

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.

Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those

specified, the conditions must be verified by the user.



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Application

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.

References

*Carlsten M, Björkström NK, Norell H, Bryceson Y, van Hall T, Baumann BC, Hanson M, Schedvins K, Kiessling R, Ljunggren HG, Malmberg KJ: DNAX accessory molecule-1 mediated recognition of freshly isolated ovarian carcinoma by resting natural killer cells. Cancer Res. 2007 Feb 1;67(3):1317-25.

*Smed-Sörensen A, Moll M, Cheng TY, Loré K, Norlin AC, Perbeck L, Moody DB, Spetz AL, Sandberg JK: IgG regulates the CD1 expression profile and lipid antigen-presenting function in human dendritic cells via FcgammaRIIa. Blood. 2008 May 15;111(10):5037-46.

*Yates J, Rovis F, Mitchell P, Afzali B, Tsang JY, Garin M, Lechler RI, Lombardi G, Garden OA: The maintenance of human CD4+ CD25+ regulatory T cell function: IL-2, IL-4, IL-7 and IL-15 preserve optimal suppressive potency in vitro. Int Immunol. 2007 Jun;19(6):785-99.

*Wiendl H, Mitsdoerffer M, Schneider D, Melms A, Lochmuller H, Hohlfeld R, Weller M: Muscle fibres and cultured muscle cells express the B7.1/2-related inducible co-stimulatory molecule, ICOSL: implications for the pathogenesis of inflammatory myopathies. Brain. 2003 May;126(Pt 5):1026-35.

*Bryceson YT, March ME, Barber DF, Ljunggren HG, Long EO: Cytolytic granule polarization and degranulation controlled by different receptors in resting NK cells. J Exp Med. 2005 Oct 3;202(7):1001-12.

*Rebetz J, Tian D, Persson A, Widegren B, Salford LG, Englund E, Gisselsson D, Fan X: Glial progenitor-like phenotype in low-grade glioma and enhanced CD133-expression and neuronal lineage differentiation potential in high-grade glioma. PLoS One. 2008 Apr 9;3(4):e1936.

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