

Antibodies

Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21

Mouse monoclonal IgG1, kappa
isotype control antibody,
unconjugated

Catalog #60070
#60070.1

500 µg 0.5 mg/mL
50 µg 0.5 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

The MOPC-21 antibody (IgG1, kappa) is suitable for use as an isotype-matched control antibody in several applications to estimate the degree of non-specific binding by an antigen-specific antibody. Ideally, the isotype control should have the same subclass of heavy chain (IgA, IgD, IgE, IgG, or IgM) and light chain (kappa or lambda) as the specific antibody being employed. If a conjugated antibody is employed, an isotype control conjugated to the same molecule (e.g. fluorochrome) should be chosen. The use of an appropriate isotype control helps confirm the specificity of the antigen-specific antibody, and indicates non-specific binding that may result from binding to Fc receptors or other cell components. The MOPC-21 antibody is produced by a mineral oil-induced plasmacytoma cell line and has unknown binding specificity, having been screened on a variety of activated, resting, live, and fixed tissues from several species, including mouse, rat, human, and non-human primates.

Target Antigen Name:	IgG1 Isotype Control
Alternative Names:	Not applicable
Gene ID:	Not applicable
Species Reactivity:	Not applicable
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	MOPC-21
Isotype:	IgG1, kappa
Immunogen:	Mineral oil
Conjugate:	Unconjugated

Applications

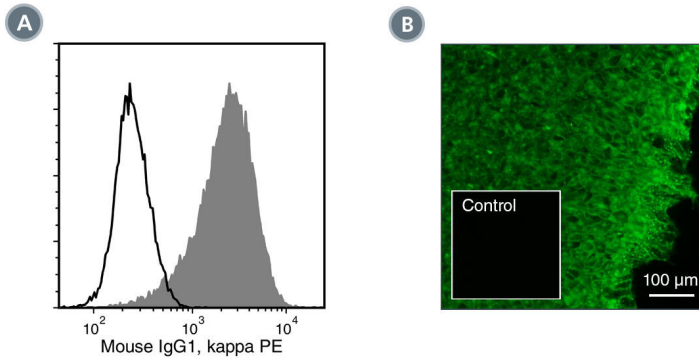
Verified:	FC, ICC, IF
Reported:	FA, FC, ICC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for use as an isotype control antibody for assessing non-specific binding to cells in flow cytometry and immunofluorescence microscopy applications (surface and intracellular staining).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	The suggested use of this antibody is at concentrations comparable to those of the specific antibody of interest.

Data



(A) Flow cytometry analysis of dendritic cells derived from human peripheral blood mononuclear cells (PBMCs). Cells were processed with EasySep™ Human CD14 Positive Selection Kit (Catalog #18058) and labeled with Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, followed by a rat anti-mouse IgG1 antibody, PE (solid line histogram), or a mouse IgG1, kappa positive control antibody (Anti-Human CD83 Antibody, Clone HB15e; Catalog #60107), followed by a rat anti-mouse IgG1 antibody, PE (filled histogram).

(B) Human embryonic stem (ES) cells were cultured using mTeSR™1 (Catalog #05850) on Corning® Matrigel®-coated glass slides, then fixed and labeled with Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, followed by goat anti-mouse IgG, FITC (inset), or with a positive control antibody of the same isotype (Anti-Human SSEA-5 Antibody, Clone 8e11; Catalog #60063), followed by goat anti-mouse IgG, FITC (green).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Menck K et al. (2015) Tumor-derived microvesicles mediate human breast cancer invasion through differentially glycosylated EMMPRIN. *J Mol Cell Biol* 7(2): 143-53. (FC)
2. Althof N et al. (2014) In vivo ablation of type I interferon receptor from cardiomyocytes delays coxsackieviral clearance and accelerates myocardial disease. *J Virol* 88(9): 5087-99. (FC)
3. Ameres S et al. (2014) CD8 T cell-evasive functions of human cytomegalovirus display pervasive MHC allele specificity, complementarity, and cooperativity. *J Immunol* 192(12): 5894-905. (FC)
4. Headland SE et al. (2014) Cutting-edge analysis of extracellular microparticles using ImageStream(X) imaging flow cytometry. *Sci Rep* 4: 5237. (FC)
5. Itoh-nakadai A et al. (2014) The transcription repressors Bach2 and Bach1 promote B cell development by repressing the myeloid program. *Nat Immunol* 15(12): 1171-80. (FC)
6. Li C et al. (2014) PMA induces SnoN proteolysis and CD61 expression through an autocrine mechanism. *Cell Signal* 26(7): 1369-78. (FC)
7. Robinet P et al. (2014) A polysaccharide virulence factor of a human fungal pathogen induces neutrophil apoptosis via NK cells. *J Immunol* 192(11): 5332-42. (FA/Blocking, FC)
8. Sapey E et al. (2014) Phosphoinositide 3-kinase inhibition restores neutrophil accuracy in the elderly: Toward targeted treatments for immunosenescence. *Blood* 123(2): 239-48. (FC)
9. Tse AKW et al. (2013) The herbal compound cryptotanshinone restores sensitivity in cancer cells that are resistant to the tumor necrosis factor-related apoptosis-inducing ligand. *J Biol Chem* 288(41): 29923-33. (FC)
10. Lian IA et al. (2011) Increased endoplasmic reticulum stress in decidual tissue from pregnancies complicated by fetal growth restriction with and without pre-eclampsia. *Placenta* 32(11): 823-29. (IHC)
11. Bryceson YT et al. (2005) Cytolytic granule polarization and degranulation controlled by different receptors in resting NK cells. *J Exp Med* 202(7): 1001-12. (FA/ADCC, Blocking)
12. Matsuyama T et al. (2005) Expression of major histocompatibility complex class II and CD80 by gingival epithelial cells induces activation of CD4+ T cells in response to bacterial challenge. *Infect Immun* 73(2): 1044-51. (FC, IF, IHC)

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