| Antibodies | Mouse IgG2a, kappa Isotype Control Antibody, Clone MOPC-173, Biotin | | STEMCELL ^M |
|--------------------------------|---|-----------|--|
| | Mouse monoclonal IgG2a, kappa isotype control antibody, biotin- | | Scientists Helping Scientists™ WWW.STEMCELL.COM |
| | conjugat | ed | TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713 |
| Catalog #60071BT #60071BT.1 | 200 µg 0.5 mg/mL | 0.5 mg/mL | INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM |
| | 50 µg | 0.5 mg/mL | FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE |
| | | | |
| | | | |

Product Description

The MOPC-173 antibody (IgG2a, 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-173 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: | IgG2a Isotype Control |
|----------------------|-----------------------|
| Alternative Names: | Not applicable |
| Gene ID: | Not applicable |
| Species Reactivity: | Not applicable |
| Host Species: | Mouse (BALB/c) |
| Clonality: | Monoclonal |
| Clone: | MOPC-173 |
| Isotype: | lgG2a, kappa |
| Immunogen: | Mineral oil |
| Conjugate: | Biotin |
| | |

Applications

| Verified: | FC |
|-----------------------|---|
| Reported: | FC |
| 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 and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin. |
| 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



-10² 10² 10³ 10⁴ Mouse IgG2a, kappa Biotin/SAV APC

Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Mouse IgG2a, kappa Isotype Control Antibody, Clone MOPC-173, Biotin, followed by streptavidin (SAV) APC (solid line histogram). Filled histogram shows labeling with a mouse IgG2a, kappa positive control antibody (Anti-Human CD45RO Antibody, Clone UCHL1, Biotin; Catalog #60097BT), followed by SAV APC.

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. 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)

2. Gurses KM et al. (2014) Markers of subclinical atherosclerosis in premenopausal women with vitamin D deficiency and effect of vitamin D replacement. Atherosclerosis 237(2): 784–89. (FC)

3. Headland SE et al. (2014) Cutting-edge analysis of extracellular microparticles using ImageStream(X) imaging flow cytometry. Sci Rep 4: 5237. (FC) 4. MacDonald KP et al. (2014) Modification of T cell responses by stem cell mobilization requires direct signalling of the T cell by G-CSF and IL-10. J Immunol 192(7): 3180–89. (FC)

5. Obermayer A et al. (2014) New aspects on the structure of neutrophil extracellular traps from chronic obstructive pulmonary disease and in vitro generation. PLoS One 9(5): e97784. (ICC, IF)

6. Van de Garde MDB et al. (2014) Chronic exposure to glucocorticoids shapes gene expression and modulates innate and adaptive activation pathways in macrophages with distinct changes in leukocyte attraction. J Immunol 192(8): 1196–208. (FC)

7. Bacher P et al. (2013) Antigen-reactive T cell enrichment for direct, high-resolution analysis of the human naive and memory Th cell repertoire. J Immunol 190(8): 3967–76. (FC)

8. Mohme M et al. (2013) HLA-DR15-derived self-peptides are involved in increased autologous T cell proliferation in multiple sclerosis. Brain 136(6): 1783–98. (FA/Blocking)

9. Ohno Y et al. (2013) Association of epigenetic alterations in the human C7orf24 gene with the aberrant gene expression in malignant cells. J Biochem 154(4): 355–62. (IP)

10. Zhou X et al. (2013) Variation in dietary salt intake induces coordinated dynamics of monocyte subsets and monocyte-platelet aggregates in humans: Implications in end organ inflammation. PLoS One 8(4): e60332. (FC)

11. Podolin PL et al. (2008) Inhibition of invariant chain processing, antigen-induced proliferative responses, and the development of collagen-induced arthritis and experimental autoimmune encephalomyelitis by a small molecule cysteine protease inhibitor. J Immunol 180(12): 7989–8003. (WB)

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