Product Description

The MPC-11 antibody (IgG2b, 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 used. If a conjugated antibody is used, 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 myeloma cell line secreting the MPC-11 antibody was derived from the transplantable Merwin Plasmacytoma-11 cell line, which was induced by implantation of a plastic diffusion chamber into a BALB/c mouse. This product 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: IgG2b Isotype Control
Alternative Names: Not applicable
Gene ID: Not applicable
Species Reactivity: Not applicable
Host Species: Mouse (BALB/c)
Clonality: Monoclonal
Clone: MPC-11
Isotype: IgG2b, kappa
Immunogen: Not applicable
Conjugate: Unconjugated

Applications

Verified: FC
Reported: ELISA, 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 human peripheral blood mononuclear cells (PBMCs) labeled with Mouse IgG2b, kappa Isotype Control Antibody, Clone MPC-11, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (solid line histogram). Filled histogram shows labeling with a mouse IgG2b, kappa positive control antibody (Anti-Human CD20 Antibody, Clone 2H7, Catalog #60008), followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC.

(B) Human induced pluripotent stem (iPS) cells were cultured in TeSR™-E8™ (Catalog #05940) on glass coverslips coated with Vitronectin XF™ (Catalog #07180), then fixed and labeled with Mouse IgG2b, kappa Isotype Control Antibody, Clone MPC-11, followed by goat anti-mouse IgG, FITC (Inset), or with a positive control antibody of the same isotype, Anti-Human OCT4 (OCT3) Antibody, Clone 3A2A20 (Catalog #60093), 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

3. Reynolds A. E. et al. (2014) Natural IgM is produced by CD5- plasma cells that occupy a distinct survival niche in bone marrow. J Immunol 194(1): 231–42. (FC)