

TECHNICAL DATA SHEET

CyFlow™ IgG2b Purified Mouse Isotype Control

REF AS131472

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	IgG2b Isotype Control
Alternative Names	—
Clone	MPC-11
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG2b
Species Reactivity	n/a
Negative Species Reactivity	Human Mouse Rat
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	KLH-coupled trinitrophenol

Specificity

This mouse IgG2b κ monoclonal antibody (clone MPC-11) reacts with an epitope irrelevant for a variety of resting, activated, live, and fixed human, mouse, and rat tissues.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed as an isotype control for Flow Cytometry analysis. To establish the amount of non-specific antibody binding, match the concentration of the correct isotype to the recommended working concentration of the antigen-specific antibody. If the background signal of the isotype control is too high (usually when working antibody concentrations are above 10 µg/ml of incubation mixture), change the experimental conditions to reduce the background.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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 µ/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 MPC-11 was generated against an epitope irrelevant for human, mouse, and rat material, and can thus be used for evaluation of the background staining that is caused by general nonspecific interactions between an mouse IgG2b 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.

References

- Gupta D, Wang Q, Vinson C, Dziarski R: Bacterial peptidoglycan induces CD14-dependent activation of transcription factors CREB/ATF and AP-1. J Biol Chem. 1999 May 14; 274(20):14012-20. < PMID: 10318814 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Im JS, Tapinos N, Chae GT, Illarionov PA, Besra GS, DeVries GH, Modlin RL, Sieling PA, Rambukkana A, Porcelli SA: Expression of CD1d molecules by human schwann cells and potential interactions with immunoregulatory invariant NK T cells. J Immunol. 2006 Oct 15; 177(8):5226-35. < PMID: 17015708 >
- Smed-Sørensen 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 FcγRIIa. Blood. 2008 May 15; 111(10):5037-46. < PMID: 18337560 >
- Liang XS, Zhou Y, Li CZ, Wan MB: Natural course of chronic hepatitis B is characterized by changing patterns of programmed death type-1 of CD8-positive T cells. World J Gastroenterol. 2010 Feb 7; 16(5):618-24. < PMID: 20128032 >
- Dewals BG, Vanderplasschen A: Malignant catarrhal fever induced by Alcelaphine herpesvirus 1 is characterized by an expansion of activated CD3+CD8+CD4- T cells expressing a cytotoxic phenotype in both lymphoid and non-lymphoid tissues.. Vet Res. 2011 Aug 22; 42:95. < PMID: 21859474 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com