

**AM26704BT-N****Mouse IgG2b Isotype Control - Biotin****Quantity:** 0.1 mg**Concentration:** 1.0 mg/ml

**Background:** 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 µg/ml) the antibody staining usually has considerable 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.

**Host / Isotype:** Mouse / IgG2b**Recommended Isotype Controls:** SM12B**Clone:** MPC-11**Immunogen:** KLH-coupled trinitrophenol

**Format:** **State:** Liquid Ig fraction  
**Buffer System:** Phosphate buffered saline (PBS)  
**Preservatives:** 15 mM sodium azide, approx. pH 7.4  
**Label:** Biotin

**Applications:** **Flow cytometry:** 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. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This mouse IgG2b (kappa) antibody reacts with an epitope irrelevant for a variety of resting, activated, live, and fixed human, mouse, and rat tissues. Other species not tested.

### Storage:

Store undiluted at 2-8°C.

**DO NOT FREEZE!**

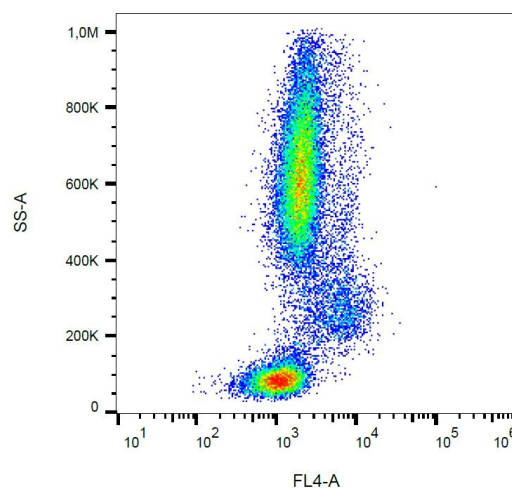
Shelf life: one year from despatch.

### General Readings:

1. Im JS, Tapinos N, Chae GT, Illarionov PA, Besra GS, DeVries GH, et al. 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. PubMed PMID: 17015708.
2. Smed-Sørensen A, Moll M, Cheng TY, Loré K, Norlin AC, Perbeck L, et al. 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. doi: 10.1182/blood-2007-07-099549. Epub 2008 Mar 12. PubMed PMID: 18337560.
3. 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. PubMed PMID: 10318814.
4. 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. doi: 10.1186/1297-9716-42-95. PubMed PMID: 21859474.
5. 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. PubMed PMID: 20128032.

### Pictures:

Example of nonspecific mouse IgG2b (MPC-11) PE-Cy<sup>TM</sup>5 signal on human peripheral blood; surface staining, 1 µg/ml.



Example of nonspecific mouse IgG2b (MPC-11) PerCP-Cy<sup>TM</sup>5.5 signal on human peripheral blood; surface staining, 1 µg/ml.

