

AM26793RP-N **Monoclonal Antibody to Human IgD - PE**

Alternate names:	Human Immunoglobulin D
Quantity:	100 Tests
Background:	Immunoglobulin D (IgD) is expressed on the surface of naive mature B cells, thus later than IgM, and is coexpressed with it then. Triggered by antigen binding, it signals through the CD79 complex to activate the B cells. Expression of IgD is lost after the isotype switch. Soluble IgD is present in very small amounts in the serum. IgD can bind to basophils and mast cells to activate them in an IgE-independent way to participate in respiratory immune defense.
Host / Isotype:	Mouse / IgG2a
Clone:	IA6-2
Immunogen:	Human IgD
Format:	State: Liquid Ig fraction Buffer System: Phosphate buffered saline (PBS) Preservatives: 15 mM sodium azide Stabilizers: 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) Label: PE – Conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use.
Applications:	Flow cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes human immunoglobulin D.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: one year from despatch.
General Readings:	<ol style="list-style-type: none">1. Bunch DO, McGregor JG, Khandoobhai NB, Aybar LT, Burkart ME, Hu Y, et al. Decreased CD5⁺ B cells in active ANCA vasculitis and relapse after rituximab. Clin J Am Soc Nephrol. 2013 Mar;8(3):382-91. doi: 10.2215/CJN.03950412. Epub 2013 Jan 4. PubMed PMID: 23293123.2. Baier G, Baier-Bitterlich G, Looney DJ, Altman A. Immunogenic targeting of recombinant peptide vaccines to human antigen-presenting cells by chimeric anti-HLA-DR and anti-surface immunoglobulin D antibody Fab fragments in vitro. J Virol. 1995 Apr;69(4):2357-65. PubMed PMID: 7533857.3. Ferrari S, Giliani S, Insalaco A, Al-Ghoniaim A, Soresina AR, Loubser M, et al. Mutations of CD40 gene cause an autosomal recessive form of immunodeficiency with hyper IgM. Proc Natl Acad Sci U S A. 2001 Oct 23;98(22):12614-9. PubMed PMID: 11675497.4. Di Sabatino A, Carsetti R, Rosado MM, Ciccocioppo R, Cazzola P, Morera R, et al.

- Immunoglobulin M memory B cell decrease in inflammatory bowel disease. *Eur Rev Med Pharmacol Sci*. 2004 Sep-Oct;8(5):199-203. PubMed PMID: 15638230.
5. Pugh-Bernard AE, Silverman GJ, Cappione AJ, Villano ME, Ryan DH, Insel RA, et al. Regulation of inherently autoreactive VH4-34 B cells in the maintenance of human B cell tolerance. *J Clin Invest*. 2001 Oct;108(7):1061-70. PubMed PMID: 11581307.
6. Degauque N, Ngono AE, Akl A, Lepetit M, Crochette R, Giral M, et al. Characterization of antigen-specific B cells using nominal antigen-coated flow-beads. *PLoS One*. 2013 Dec 30;8(12):e84273. doi: 10.1371/journal.pone.0084273. eCollection 2013. PubMed PMID: 24386360.
7. Chang NH, McKenzie T, Bonventi G, Landolt-Marticorena C, Fortin PR, Gladman D, et al. Expanded population of activated antigen-engaged cells within the naive B cell compartment of patients with systemic lupus erythematosus. *J Immunol*. 2008 Jan 15;180(2):1276-84. PubMed PMID: 18178868.