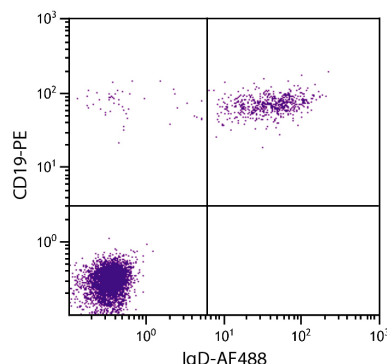




Goat F(ab')₂ Anti-Human IgD

Cat. No.	Format	Size
2032-01	Purified (UNLB)	0.5 mg
2032-02	Fluorescein (FITC)	0.5 mg
2032-08	Biotin (BIOT)	0.5 mg
2032-09	R-phycoerythrin (PE)	0.25 mg
2032-30	Alexa Fluor [®] 488 (AF488)	0.5 mg
2032-31	Alexa Fluor [®] 647 (AF647)	0.5 mg
2032-32	Alexa Fluor [®] 555 (AF555)	0.5 mg



Human peripheral blood lymphocytes were stained with Goat F(ab')₂ Anti-Human IgD-AF488 (SB Cat. 2032-30) and Mouse Anti-Human CD19-PE (SB Cat. No. 9340-09).

Description

Specificity	Reacts with the heavy chain of human IgD
Source	Pepsin digest of Goat Anti-Human IgD (SB Cat. No. 2030)
Cross Adsorption	Human IgG, IgM, and IgA; may react with IgD from other species

Applications

Quality tested applications include –

ELISA
FLISA
FC^{3-5,7-11}

Other referenced applications include –

IHC-FS^{1-3,6,9}
IHC-PS³
Sep^{1,6}
Stim¹²⁻¹⁴

Working Dilutions

ELISA	BIOT conjugate	1:5,000 – 1:20,000
FLISA	FITC, AF488, and AF555 conjugates	1:100 – 1:400
	PE and AF647 conjugates	≤ 1 µg/mL
Flow Cytometry	FITC, BIOT, and AF488 conjugates	≤ 1 µg/10 ⁶ cells
	PE and AF647 conjugates	≤ 0.1 µg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

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Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC), Alexa Fluor® 488 (AF488), Alexa Fluor® 555 (AF555), and Alexa Fluor® 647 (AF647) conjugates are supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.25 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

1. Xu W, He B, Chiu A, Chadburn A, Shan M, Buldys M, et al. Epithelial cells trigger frontline immunoglobulin class switching through a pathway regulated by the inhibitor SLPI. *Nat Immunol.* 2007;8:294-303. (IHC-FS, Sep)
2. Xu W, Santini PA, Matthews AJ, Chiu A, Plebani A, He B, et al. Viral double-stranded RNA triggers Ig class switching by activating upper respiratory mucosa B cells through an innate TLR3 pathway involving BAFF. *J Immunol.* 2008;181:276-87. (IHC-FS)
3. Chen K, Xu W, Wilson M, He B, Miller NW, Bengtén E, et al. Immunoglobulin D enhances immune surveillance by activating antimicrobial, pro-inflammatory and B cell-stimulating programs in basophils. *Nat Immunol.* 2009;10:889-98. (IHC-FS, IHC-PS, FC)
4. Green LL, Jakobovits A. Regulation of B cell development by variable gene complexity in mice reconstituted with human immunoglobulin yeast artificial chromosomes. *J Exp Med.* 1998;188:483-95. (FC)
5. Joseph AM, Babcock GJ, Thorley-Lawson DA. EBV persistence involves strict selection of latently infected B cells. *J Immunol.* 2000;165:2975-81. (FC)
6. He B, Xu W, Santini PA, Polydorides AD, Chiu A, Estrella J, et al. Intestinal bacteria trigger T cell-independent immunoglobulin A₂ class switching by inducing epithelial-cell secretion of the cytokine APRIL. *Immunity.* 2007;26:812-26. (Sep, IHC-FS)
7. Warnatz K, Schlesier M. Flowcytometric phenotyping of common variable immunodeficiency. *Cytometry B Clin Cytom.* 2008;74:261-71. (FC)
8. He B, Santamaria R, Xu W, Cols M, Chen K, Puga I, et al. The transmembrane activator TACI triggers immunoglobulin class switching by activating B cells through the adaptor MyD88. *Nat Immunol.* 2010;11:836-45. (FC)
9. Puga I, Cols M, Barra CM, He B, Cassis L, Gentile M, et al. B cell-helper neutrophils stimulate the diversification and production of immunoglobulin in the marginal zone of the spleen. *Nat Immunol.* 2012;13:170-80. (FC, IHC-FS)
10. Gieseke F, Mang P, Viebahn S, Sonntag I, Kruchen A, Erbacher A, et al. Siglec-7 tetramers characterize B-cell subpopulations and leukemic blasts. *Eur J Immunol.* 2012;42:2176-86. (FC)
11. Li FJ, Schreeder DM, Li R, Wu J, Davis RS. FCRL3 promotes TLR9-induced B-cell activation and suppresses plasma cell differentiation. *Eur J Immunol.* 2013;43:2980-92. (FC)
12. Jiang A, Clark EA. Involvement of Bik, a proapoptotic member of the Bcl-2 family, in surface IgM-mediated B cell apoptosis. *J Immunol.* 2001;166:6025-33. (Stim)
13. Rankin AL, Seth N, Keegan S, Andreyeva T, Cook TA, Edmonds J, et al. Selective inhibition of BTK prevents murine lupus and antibody-mediated glomerulonephritis. *J Immunol.* 2013;191:4540-50. (Stim)
14. Smith MJ, Packard TA, O'Neill SK, Dunand CJ, Huang M, Fitzgerald-Miller L, et al. Loss of anergic B cells in pre-diabetic and new onset T1D patients. *Diabetes.* 2014 Dec 18. pii: DB_131798. [Epub ahead of print]. (Stim)

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