Anti- Human IgD (IA6-2)

	REF	Σ		
FITC	IGDF-25T	25 test	20 µl/test	RUO
PerCP/Cyanine5.5	IGDPPC5.5-25T	25 test	5 µl/test	

1. PRODUCT DESCRIPTION

Clone: IA6-2

Isotype: Mouse IgG2a, ƙ

Tested application: flow cytometry (Quality tested).

Immunogen: Human IgD

Species reactivity: Human

Storage instruction: store in the dark at 2-8 °C

Storage buffer: aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN 3).

Recommended usage: Immunostep's anti-human IgD, clone IA6-2, is a monoclonal antibody intended for the identification of cells expressing IgD protein in peripheral blood using a compatible flow cytometer. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10 6 cells or 100 l of sample. Anti-IgD should be used with wash steps before reagent addition or with ficoll gradient separation to remove Immunoglobulins from serum.

Presentation: liquid

Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma.

Purification: Affinity chromatography.

Other Names: Ig delta chain C region

Gene ID: 3495

2. ANTIGEN DETAILS

Large description: Immunoglobulin D (IgD) is one of the five major classes of human immunoglobulins (IgG, IgA, IgM, IgE, and IgD). Immunoglobulins differ in the structure of their heavy chains and in their biological effector functions.

IgD is characterized by the presence of the δ heavy chain and exists in both membrane-bound and secreted forms. In normal adults, serum IgD represents less than 1% of total immunoglobulins, with concentrations typically below 0.4 mg/mL. Membrane-bound IgD is co-expressed with IgM on the surface of mature, naïve B lymphocytes and forms part of the B-cell receptor (BCR) complex, where it plays a role in regulating B-cell activation and maintaining immune homeostasis.

Secreted IgD is mainly produced in the upper respiratory tract and may contribute to mucosal immune defense by binding to basophils and mast cells, thereby promoting antimicrobial and inflammatory responses. Altered expression or dysregulation of IgD has been associated with certain immunodeficiencies, autoimmune conditions, and B-cell lymphoproliferative disorders.

The anti-human IgD monoclonal antibody, clone IA6-2, specifically recognizes the δ heavy chain of human IgD and does not cross-react with other immunoglobulin isotypes (IgG, IgA, IgM, or IgE). This antibody is widely used in flow cytometry and immunofluorescence applications to identify and characterize IgD-expressing B-cell subsets, providing valuable information for studies of B-cell maturation, immune regulation, and pathological alterations in immunoglobulin expression. (1-2).

3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties. Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price..

4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.

Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to www.immunostep.com technical support for more information.

5. REFERENCES

1. EsChen K, Xu W, Wilson M, He B, Miller NW, Bengtén E,Edholm ES, Santini PA, Rath P, Chiu A, Cattalini M, Litzman J, B Bussel J, Huang B, Meini A, Riesbeck K, Cunningham-Rundles C, Plebani A, Cerutti A. Immunoglobulin D enhances immune surveillance by activating antimicrobial, proinflammatory and B cell-stimulating programs in basophils. Nat Immunol. 2009 Aug;10(8):889-98. doi: 10.1038/ni.1748. Epub 2009 Jun 28. PMID: 19561614; PMCID: PMC2785232.

2. Perez-Andres M, Paiva B, Nieto WG, Caraux A, Schmitz A, Almeida J, Vogt RF Jr, Marti GE, Rawstron AC, Van Zelm MC, Van Dongen JJ, Johnsen HE, Klein B, Orfao A; Primary Health Care Group of Salamanca for the Study of MBL. Human peripheral blood B-cell compartments: a crossroad in B-cell traffic. Cytometry B Clin Cytom. 2010;78 Suppl 1:S47-60. doi: 10.1002/cyto.b.20547.PMID: 20839338.

6. EXPLANATION OF SYMBOLS

	Form
REF	Catalog reference
Σ	Contains sufficient for > test
	Quantity per test
	Regulatory Status
RUO	Research Use Only
[A]	Concentration
	Manufacturer

7. MANUFACTURED BY:

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