abcam

ab328579

PerCP/Cy5.5® Anti-IgD antibody [IA6-2]

Key facts

Isotype	IgG2a
Host species	Mouse
Conjugation	PerCP/Cy5.5®
Excitation/Emission	Ex: 482nm, Em: 695nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human IGHD. Database link P01880
Clone number	IA6-2
Purification technique	Size-exclusion chromatography
Specificity	The mouse monoclonal antibody IA6-2 recognizes human immunoglobulin D.
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Target data

See full target information IGHD

Function	Constant region of immunoglobulin heavy chains. Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins-secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens (PubMed:20176268, PubMed:22158414). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:17576170, PubMed:20176268). IgD is the major antigen receptor isotype on the surface of most peripheral B-cells, where it is coexpressed with IgM. The membrane-bound IgD (mIgD) induces the phosphorylation of CD79A and CD79B by the Src family of protein tyrosine kinases. Soluble IgD (sIgD) concentration in serum below those of IgG, IgA, and IgM but much higher than that of IgE. IgM and IgD molecules present on B cells have identical V regions and antigen-binding sites. After the antigen binds to the B-cell receptor, the secreted form sIgD is shut off. IgD is a potent inducer of TNF, IL1B, and IL1RN. IgD also induces release of IL6, IL10, and LIF from peripheral blood mononuclear cells. Monocytes seem to be the main producers of cytokines in vitro in the presence of IgD (PubMed:10702483, PubMed:11282392, PubMed:8774350).

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

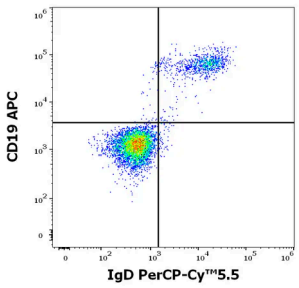
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

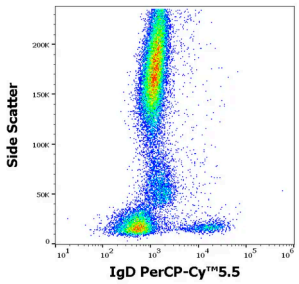
3 product images



Flow Cytometry - PerCP/Cy5.5® Anti-IgD antibody [IA6-2] (ab328579)

IgD Flow Cytometry staining of human lymphocytes using mouse Anti-IgD antibody

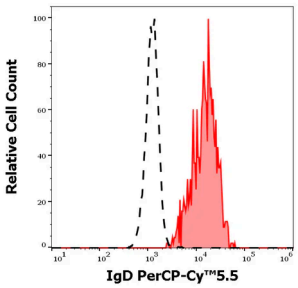
Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human IgD (IA6-2) PerCP-Cy™5.5 antibody (4 µl reagent / 100 µl of peripheral whole blood) and anti-human CD19 (LT19) APC antibody (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - PerCP/Cy5.5® Anti-IgD antibody [IA6-2] (ab328579)

IgD Flow Cytometry staining of human peripheral whole blood using mouse Anti-IgD antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human IgD (IA6-2) PerCP-Cy™5.5 antibody (4 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - PerCP/Cy5.5® Anti-IgD antibody [IA6-2] (ab328579)

IgD Flow Cytometry staining of human peripheral whole blood using mouse Anti-IgD antibody

Separation of human IgD positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human IgD (IA6-2) PerCP-Cy™5.5 antibody (4 µl reagent / 100 µl of peripheral whole blood).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.