Anti-Human CD32 Antibody, Clone IV.3, FITC

Antibodies

Mouse monoclonal IgG2b antibody against human CD32, FITC-conjugated

Catalog	#60012FI	100 Tests	20 µL/test
	#60012FI.1	25 Tests	20 µL/test

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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
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Product Description

The IV.3 antibody reacts with human CD32 (FcγRII), an ~40 kDa type 1 transmembrane glycoprotein that mediates several functions including phagocytosis, cytotoxicity, immunomodulation and platelet aggregation. CD32 is encoded by three genes (A, B, C) and at least 6 isoforms are generated via alternative mRNA splicing, i.e., IIa1, IIa2, IIb1, IIb2, IIb3 and IIc. All isoforms are expressed by monocytes/macrophages, placental trophoblasts and endothelial cells. In addition, the IIb isoform is expressed by B cells, and the IIa isoform by platelets, granulocytes and, weakly, by B cells. Isoform IIc is expressed by NK cells and neutrophils. CD32 binds weakly to the Fc region of monomeric IgG but more strongly to IgG aggregates and immune complexes. These interactions can result in non-specific labeling in antibody-based detection and cell separation experiments and the IV.3 antibody may be employed as a blocking antibody to reduce non-specific binding. The IV.3 antibody binds most strongly to the IIa isoforms of CD32, with the epitope mapped to amino acids 132 - 137 [FSHLDP] in domain 2, within the ligand binding site. Binding of the IV.3 antibody can be blocked by clone FLI8.26 in flow cytometry analyses, suggesting that these clones may share a common or overlapping epitope.

Target Antigen Name:	CD32
Alternative Names:	FCR II, FcγRII
Gene ID:	2212
Species Reactivity:	Human
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	IV.3
Isotype:	IgG2b, kappa
Immunogen:	K-562 human erythromyeloblastoid leukemia cell line
Conjugate:	FITC

Applications

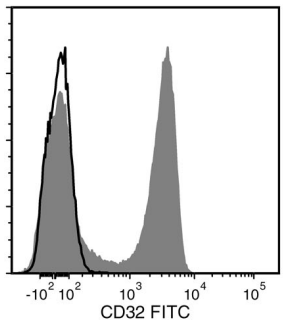
Verified:	CellSep, FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human T Cell Enrichment Kit (Catalog #19051) and EasySep™ Human CD4+ T Cell Enrichment Kit (Catalog #19052).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline containing < 0.1% (w/v) sodium azide and < 0.1% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is 20 µL per 1 x 10^6 cells in 100 µL or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD32 Antibody, Clone IV.3, FITC (filled histogram) or Mouse IgG2b, kappa Isotype Control Antibody, Clone MPC-11, FITC (Catalog #60072FI; solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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