

30-2914: Anti-Hu CD32 FITC Mab (3D3)

Clonality :	Monoclonal
Clone Name :	3D3
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	FCGR2A
Gene ID :	2212
Uniprot ID :	P12318
Alternative Name :	FCG2, FCGR2A, IGFR2
Isotype :	Mouse IgG1 kappa
Immunogen Information :	purified glycosylated recombinant human FcgammaRIIa2

Description

Specificity: The mouse monoclonal antibody 3D3 recognizes an extracellular epitope of CD32, a 40 kDa polymorphic transmembrane glycoprotein serving as the low affinity receptor for aggregated IgG. This antibody recognizes CD32 isoforms on B cells of all donors, but on platelets, monocytes, and granulocytes of only some donors (131R variant, but not 131H variant).

CD32 (FcgammaRII) is a low affinity receptor for aggregated IgG. It is strongly expressed on monocytes, granulocytes, myeloid and myeloblastic cell lines, and weakly on B cells, CD34+ bone marrow cells, and resting and activated platelets. After binding its ligand, CD32 induces IgG-mediated phagocytosis and oxidative burst in monocytes and neutrophils, whereas in B cells it mediates a negative signal. This polymorphic transmembrane glycoprotein is expressed not only in the activating (CD32a) and inhibitory isoform (CD32b), but also in individual variants with differing avidities for IgG subtypes (e.g. the CD32a131R and CD32a131H allotypes).

Product Info

Amount :	100 Tests
Purification :	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Storage Buffer: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

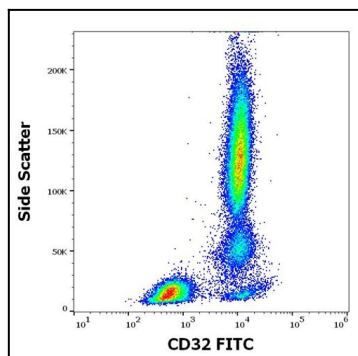


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD32 (3D3) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).

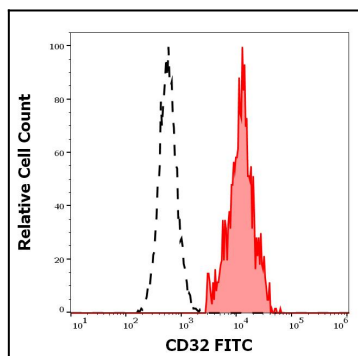


Figure 2: Separation of human CD32 positive lymphocytes (red-filled) from CD32 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD32 (3D3) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).