

Datasheet for ABIN1302937  
**anti-FCGR1A antibody (FITC)**

2 Images

10 Publications

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## Overview

Quantity:	100 tests
Target:	FCGR1A
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This FCGR1A antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

## Product Details

Immunogen:	Rheumatoid synovial fluid cells and fibronectin purified human monocytes
Clone:	10-1
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 10.1 recognizes an extracellular epitope on CD64/FcgammaRI, a 72 kDa single chain type I glycoprotein, that is expressed on monocytes/macrophages, dendritic cells, and activated granulocytes. The epitope is sensitive to formalin fixation.
Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

## Target Details

Target:	FCGR1A
Alternative Name:	CD64 ( <a href="#">FCGR1A Products</a> )
Background:	Fc fragment of IgG receptor Ia,CD64 (FcgammaRI) is a cell surface receptor for Fc region of IgG. It is composed of specific ligand binding alpha subunit and promiscuous gamma subunit, which is indispensable for tyrosine-based signaling. However, even the alpha subunit can transduce signals leading to cellular effector functions. The isoform FcgammaRIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include FcgammaRIb and FcgammaRIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, FcgammaRI (a1) can potentially enhance MHC class I and II antigen presentation in vitro and in vivo.,FcRI, IGFR1, FcGR1A
Gene ID:	2209
UniProt:	<a href="#">P12314</a>
Pathways:	<a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a>

## Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µL reagent / 100 µL of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

## Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<b>Do not freeze.</b>

## Handling

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Avoid prolonged exposure to light.

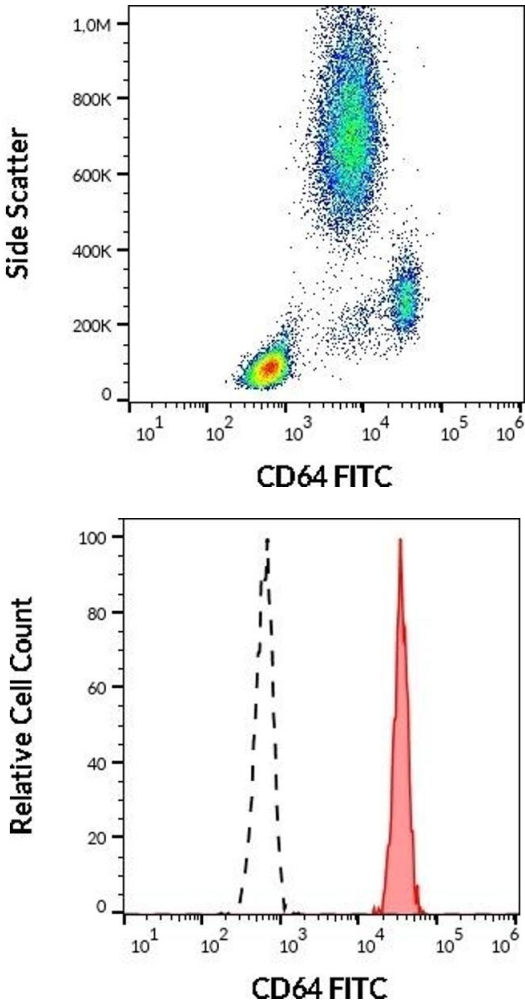
Storage: 4 °C

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

## Publications

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- Product cited in:
- Devaraj, Davis, Simon, Jialal: "CRP promotes monocyte-endothelial cell adhesion via Fcγ receptors in human aortic endothelial cells under static and shear flow conditions." in: **American journal of physiology. Heart and circulatory physiology**, Vol. 291, Issue 3, pp. H1170-6, (2006) ([PubMed](#)).
- Devaraj, Du Clos, Jialal: "Binding and internalization of C-reactive protein by Fcγ receptors on human aortic endothelial cells mediates biological effects." in: **Arteriosclerosis, thrombosis, and vascular biology**, Vol. 25, Issue 7, pp. 1359-63, (2005) ([PubMed](#)).
- Roura-Mir, Wang, Cheng, Matsunaga, Dascher, Peng, Fenton, Kirschning, Moody: "Mycobacterium tuberculosis regulates CD1 antigen presentation pathways through TLR-2." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 175, Issue 3, pp. 1758-66, (2005) ([PubMed](#)).
- Beekman, Bakema, van der Linden, Tops, Hinten, van Vugt, van de Winkel, Leusen: "Modulation of FcγRI (CD64) ligand binding by blocking peptides of periplakin." in: **The Journal of biological chemistry**, Vol. 279, Issue 32, pp. 33875-81, (2004) ([PubMed](#)).
- Sánchez-Torres, García-Romo, Cornejo-Cortés, Rivas-Carvalho, Sánchez-Schmitz: "CD16+ and CD16- human blood monocyte subsets differentiate in vitro to dendritic cells with different abilities to stimulate CD4+ T cells." in: **International immunology**, Vol. 13, Issue 12, pp. 1571-81, (2001) ([PubMed](#)).
- There are more publications referencing this product on: [Product page](#)



### Flow Cytometry

**Image 1.** Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD64 (10.1) FITC antibody (4  $\mu$ L reagent / 100  $\mu$ L of peripheral whole blood).

### Flow Cytometry

**Image 2.** Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD64 (10.1) FITC antibody (4  $\mu$ L reagent / 100  $\mu$ L of peripheral whole blood).