

## **Product Data Sheet**

## FITC anti-human CD164

Catalog # / Size: 324805 / 25 tests

324806 / 100 tests

Clone: 67D2

**Isotype:** Mouse IgG1,  $\kappa$ 

Immunogen: T-47D breast carcinoma line

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with

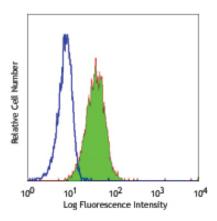
FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood granulocytes stained with 67D2 FITC

## **Applications:**

**Applications:** FC - Quality tested IF - Reported in the literature

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. Test size products are transitioning from 20 μl to 5 μl per test. Please check your vial or your CoA to find the

suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at

www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for the relevant formats) include: Western blotting<sup>2,3</sup> under non-reducing conditions

(detects an 80-100 kD protein as well as a high molecular weight aggregate of approximately 220 kD), and

immunofluorescence<sup>3</sup>.

Application References: 1. Watt SM, et al. 1998. Blood 92:849.

Watt SM, et al. 2000. Blood 95:3113.

3. Doyonnas R, et al. 2000. J. Immunol. 165:840.

4. Vogel W, et al. 2002. Haematologica 88:126.

**Description:** The 67D2 monoclonal antibody recognizes human CD164 also known as sialomucin CD164, MUC-24, and multi-glycosylated core protein 24. CD164 is a single pass transmembrane protein with short cytoplasmic tail that is highly N- and O-glycosylated. This protein contains sialic acid and a Ser-Gly motif that may serve as an attachment for a glycosaminoglycan side chain. Three splice variants of CD164 have been reported with apparent molecular weights ranging between 80-100 kD. CD164 is expressed in bone marrow, bone marrow stromal cells, and CD34+ hematopoietic cells myeloid and erythroid progenitors; and activated basophils. Expression has also been reported on a variety of carcinomas and leukemic cells and in the small intestine, colon, lung, and thyroid. CD164 plays a role in cell adhesion and proliferation and acts as a negative signaling molecule for hematopoietic progenitor cells. CD164 has also been reported to be involved in myogenic differentiation and cancer metastasis. The 67D2 antibody has been shown to be useful for the flow cytometric detection of human CD164, Western blotting under non-reducing conditions (detects an 80-100 kD protein as well as a high molecular weight aggregate of approximately 220 kD), and

immunofluorescence.

Antigen References: 1. Zannettino ACW, et al. 1998. Blood 92:2613.

2. Havens AM, et al. 2006. BMC Cancer 6:195.

3. Lee YN, et al. 2001. Mol. Cell. Biol. 21:7696.

**Related Products: Product** Clone Application FC, ICC, ICFC

Cell Staining Buffer MOPC-21

FITC Mouse IgG1, κ Isotype Ctrl (FC) Human TruStain FcX™ (Fc Receptor Blocking Solution) FC, ICC, ICFC

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