

Human Recombinant CD16B Stable Cell Line Cat. No. M00602

Version 04282015

I. INTRODUCTION

Catalog Number: M00602

Cell Line Name: CHO-K1/CD16B

Gene Synonyms: CD16; FCG3; CD16b; FCGR3; FCR-10; FCRIII; FCRIIIb Expressed Gene: Codon Optimized from CCDS41433.1; no expressed tags

Host Cell: CHO-K1

Quantity: Two vials of frozen cells (1×10⁶ per vial)

Stability: 15 passages

Application: Binding assay or use as immunogen

Freeze Medium: 95% complete growth medium, 5% DMSO

Complete Growth Medium: F12K, 10% FBS

Culture Medium: F12K, 10% FBS, 8 µg/ml Puromycin

Mycoplasma Status §: Negative

Storage: Liquid nitrogen immediately upon receipt

II. BACKGROUND

CD16 has been identified as Fc receptors FcγRIIIa (CD16a) and FcγRIIIb (CD16b). These receptors bind to the Fc portion of IgG antibodies which then activates the NK cell for antibody-dependent cell-mediated cytotoxicity. A lack of CD16 in a given population of neutrophils may indicate prematurity, as could be caused by a left shift due to neutrophilic leukocytosis induced by tissue necrosis or bacterial infection.

^{§:} GenScript employs a PCR-based method to test the mycoplasma. The test covers 11 of the most common strains of mycoplasma, (covering approximately 95% of M. fermentans, M. hyorhinis, M. arginini, M. orale, M. salivarium, M. hominis, M. pulmonis, M. arthritidis, M. neurolyticum, M. hyopneumoniae and M. capricolum) and one species Ureaplasma (U. urealyticum), with sufficient sensitivity and specificity.



III. REPRESENTATIVE DATA

- Protein Expression Validation

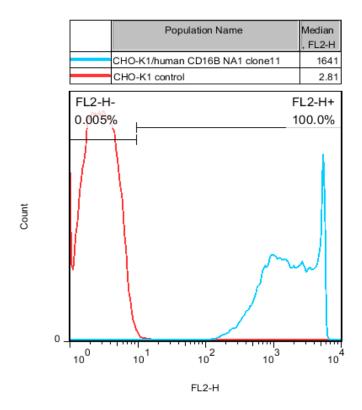


Figure 1. FACS analysis of human CD16B expression in CHO-K1 cells.

IV. THAWING AND SUBCULTURING

Thawing Protocol

- 1. Remove the vial from liquid nitrogen tank and thaw cells quickly in a 37°C water-bath.
- 2. Just before the cells are completely thawed, decontaminate the outside of the vial with 70% ethanol and transfer the cells to a 15 ml centrifuge tube containing 9 ml of complete growth medium.
- 3. Pellet cells by centrifugation at 200 x g for 5 min, and remove the medium.
- 4. Resuspend the cells in complete growth medium.
- 5. Transfer the cell suspension to a 10 cm dish with 10 ml of complete growth medium.
- 6. Grow the cells in incubator with 37°C, 5 %CO₂.
- 7. Add antibiotic the following day.

Sub-culturing Protocol

- 1. Remove the culture medium from cells.
- 2. Wash cells with PBS (pH=7.4) to remove all traces of serum that contains trypsin inhibitor.

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- 3. Add 2.0 ml of 0.25% (w/v) Trypsin- EDTA (GIBCO, Cat No. 25200-072) solution into 10 cm dish and observe the cells under an inverted microscope until cell layer is dispersed (usually within 3 to 5 minutes).
 Note: To avoid cells clumping, do not agitate the cells by hitting or shaking the dish while waiting for the cells detach. If cells are difficult to detach, please place the dish in 37°C incubator for ~2 min.
- 4. Add 6.0 to 8.0 ml of complete growth medium into dish and aspirate cells by gently pipetting.
- 5. Centrifuge the cells at 200 x g for 5 min, and remove the medium.
- 6. Resuspend the cells in culture medium and add the cells suspension to new culture dish.
- 7. Grow the cells in incubator with 37°C, 5% CO₂.

Subcultivation Ratio: 1:3 to 1:8 weekly. Medium Renewal: Every 2 to 3 days

V. REFERENCES

1. Vidranski, V., Laska, R., Sikiric, D. and Skerk, V. Platelet satellitism in infectious disease [J]. Biochem Med (Zagreb). 2015, 25(2): 285–294.

GenScript USA Inc,

860 Centennial Ave.

Piscataway, NJ 08854 Toll-Free: 1-877-436-7274

Tel: 1-732-885-9188, Fax: 1-732-210-0262

Email: product@genscript.com
Web: http://www.genscript.com

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