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## Anti-Human CD71 (Transferrin Receptor) eFluor® 650NC

Catalog Number: 95-0719 Also known as: TFRC RUO: For Research Use Only. Not for use in diagnostic procedures.



CD71 eFluor 650

### **Product Information**

Contents: Anti-Human CD71 (Transferrin Receptor) eFluor® 650NC [REF] Catalog Number: 95-0719

Clone: OKT9 (OKT-9) Concentration: 5 uL Host/Isotype: Mouse IgG1, kappa Staining of 3 day Anti-Human CD3 and Anti-Human CD28 Functional Grade Purified (cat. 16-0037 and 16-0289)-stimulated normal human peripheral blood cells with Mouse IgG1 K Isotype Control eFluor® 650NC (cat. 95-4714) (blue histogram) or Anti-Human CD71 (Transferrin Receptor) eFluor® 650NC (purple histogram). Cells in the lymphocyte gate were used for analysis.

 Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 ✓
 Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.

 Imit Batch Code: Refer to vial

 ☑
 Use By: Refer to vial

 ✓
 Contains sodium azide

### Description

The OKT9 monoclonal antibody reacts with human CD71, a 170-180 kDa type II transmembrane protein. CD71, the transferrin receptor, exists as a homodimer on the cell surface and is essential for cellular growth. CD71 is expressed by immature proliferating cells and at low levels on resting mature lymphocytes. Antigen or mitogen stimulation of T and B cells upregulates the expression of CD71.

### **Applications Reported**

This OKT9 (OKT-9) antibody has been reported for use in flow cytometric analysis.

### **Applications Tested**

This OKT9 (OKT-9) antibody has been pre-titrated and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5  $\mu$ L per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

The isotype control eFluor® 650NC Mouse IgG1 (cat. 95-4714) should be used at 5 uL/test.

Laser/Filter Recommendation: When using eFluor 650NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 630 LP dichroic mirror with the 660/40 bandpass filter. The eFluor 650NC can be minimally excited off of the 633 nm laser, and because its peak emission is 650nm, it will require some compensation out of the APC detector.

**Fixation Recommendation:** When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 uL. (100 uL cells + 100 uL IC Fixation Buffer (cat. 00-8222)) and the exposure time at 30-60 minutes to preserve the optimal fluorescent signal from the nanocrystal reagent.

For answers about fixation and other questions, please refer to Nanocrystal Frequently Asked Questions or contact eBioscience Technical Support.



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### References

Wenning LA, Murphy RM. 1999. Coupled cellular trafficking and diffusional limitations in delivery of immunotoxins to multicell tumor spheroids. Biotechnol Bioeng. 62(5):562-75

Terng HJ, Gessner R, Fuchs H, Stahl U, Lang C. Human transferrin receptor is active and plasma membranetargeted in yeast. FEMS Microbiol Lett. 1998 Mar 1;160(1):61-7 (**OKT9**, IHC (electron microscopy), PubMed)

Franco A, Paroli M, Testa U, Benvenuto R, Peschle C, Balsano F, Barnaba V. Transferrin receptor mediates uptake and presentation of hepatitis B envelope antigen by T lymphocytes. J Exp Med. 1992 May 1;175(5):1195-205. (**OKT9**, FA, PubMed)

Salcedo TW, Fleit HB. 1991. Plasma membrane and intracellular pools of transferrin receptors decline during in vitro cultivation of U937 cells. Cell Prolif. 24(4):383-401

Sutherland R, Delia D, Schneider C, Newman R, Kemshead J, Greaves M. 1981. Ubiquitous cell-surface glycoprotein on tumor cells is proliferation-associated receptor for transferrin. Proc Natl Acad Sci U S A. 78(7): 4515–4519.

### **Related Products**

00-4222 Flow Cytometry Staining Buffer 16-0037 Anti-Human CD3 Functional Grade Purified (OKT3) 16-0289 Anti-Human CD28 Functional Grade Purified (CD28.2) 95-4714 Mouse IgG1 K Isotype Control eFluor® 650NC (P3.6.2.8.1)

#### Legal

Under patent number: US 7,939,170 and additional pending patent application(s)