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AM08050FC-N

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## Monoclonal Antibody to CD71 / TFRC - FITC

Alternate names: TfR1, Transferrin receptor protein 1, p90

Catalog No.: AM08050FC-N

Quantity: 0.5 mg
Concentration: 0.5 mg/ml

Background: CD71, a type II transmembrane glycoprotein expressed on the cell surface as a homodimer,

is the Transferrin Receptor. It is essential for the growth of normal and neoplastic cells. (Ref.1,4) It is expressed at low levels on resting B and T lymphocytes but is upregulated during responses to antigens and mitogens, presumably reflecting the iron dependence of proliferation. (Ref.4) Its expression declines with maturation and differentiation. CD71 plays a critical role in cell proliferation by controlling the supply of iron, which is essential for many metabolic pathways, through the binding and endocytosis of transferrin, the major ironcarrying protein. It may also be involved in signal transduction via its association

with the T cell receptor zeta chain.

Clone RI7217 inhibits cell proliferation in vitro. (Ref.2)

Uniprot ID: <u>Q62351</u>

NCBI: NP 035768.1

 GeneID:
 22042

 Host / Isotype:
 Rat / IgG2a

 Clone:
 RI7217

**Format:** State: Liquid purified lg fraction.

**Buffer System:** PBS containing 0.09% Sodium Azide as preservative.

Label: FITC - Fluorescein Isothiocyanate Isomer 1

**Applications:** Flow Cytometry:  $\langle \ \ | = 1 \, \mu g / 10e6 \, \text{cells.}$  (Ref.1-3,5)

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognises CD71/Transferrin Receptor, Mr 180-190 kDa (90-95 kDa under

reducing conditions). **Species:** Mouse.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Lesley, J., R. Hyman, R. Schulte, and J. Trotter. 1984. Cell Immunol. 83:14.

2. Kemp, J. D., J. A. Thorson, F. Gomez, K. M. Smith, J. S. Cowdery, and Z. K. Ballas. 1989.



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Cell Immunol. 122:218.

- 3. Lesley, J.F., and R.J. Schulte. 1985. Mol. Cell. Biol. 5:1814.
- 4. Kemp, J. D., J. A. Thorson, T. H. McAlmont, M. Horowitz, J. S. Cowdery, and Z. K. Ballas. 1987. J. Immunol. 138:2422.
- 5. Sauvage, C.A., J.C. Mendelsohn, J.F. Lesley, and I.S. Trowbridge. 1987. Cancer Res.47:747.

