

## Acris Antibodies, Inc.

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# Monoclonal Antibody to CD71 / TFRC - PE

Alternate names: TfR1, Transferrin receptor protein 1, p90

Catalog No.: AM08050RP-N

Quantity: 0.1 mg
Concentration: 0.1 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: Q62351

NCBI: NP 035768.1

 GeneID:
 22042

 Host / Isotype:
 Rat / IgG2a

 Clone:
 RI7217

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

Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing

agent.

Label: PE - R-Phycoerythrin

**Applications:** Flow Cytometry:  $\langle \ \ | = 0.2 \, \mu \text{g} / 10e6 \, \text{cells.}$  (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.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

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

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.





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### **General Readings:**

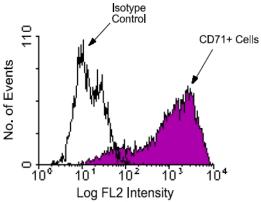
- 1. Lesley, J., R. Hyman, R. Schulte, and J. Trotter. 1984. Cell Immunol. 83:14.
- 2. Kemp, J. D., J. A. Thorson, F. Gomez, K. M. Smith, J. S. Cowdery, and Z. K. Ballas. 1989. Cell Immunol. 122:218.
- 3. Lesley, J.F., and R.J. Schulte. 1985. Mol. Cell. Biol. 5:1814.
- 4. Kemp, J. D., J. A. Thorson, 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.

#### **Pictures:**

Immunofluorescent Staining: Fresh BALB/c spleen cells were activated by incubation for 72 hours with concanavalin A. Control cells were incubated in medium alone. At the end of 72 hours, the cells were harvested and stained with Rat anti-Mouse CD72-PE. Total cells were then gated and analyzed on a FACScan(TM) flow cytometer (BDIS,

San Jose, CA). Amount Used:  $\langle / = 0.1 \rangle$ 

 $\mu g/10e6$  cells.



Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com