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AM08042RP-N

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Monoclonal Antibody to CD40 - PE

B-cell surface antigen CD40, Bp50, CD40L receptor, CDw40, TNFRSF5, Tumor necrosis Alternate names:

factor receptor superfamily member 5

Catalog No.: AM08042RP-N

Quantity: 0.2 mg **Concentration:** $0.1 \, \text{mg/ml}$

Background: CD40 is a type I cell surface protein belonging to the tumor necrosis factor superfamily of

cell surface receptors. In mice it is expressed on B lineage cells, follicular dendritic cells, thymic epithelium, and interdigitating cells in the T-cell zone of secondary lymphoid organs. (Ref.1-5) CD40 first becomes detectable on a subset of small pre-B II cells in bone marrow, with the levels of CD40 expression increasing thereafter during B-cell maturation. Immature B cells (IgM+IgDloB220lo) express intermediate levels of CD40, whereas mature B cells (IgM+IgDhiB220hi) express high levels. (Ref.4) CD40 has a central role in B cell growth and differentiation, and signalling through CD40 in combination with IL-4 reportedly induces immunoglobulin isotype switching and secretion of IgE. (Ref.6) The agonistic 1C10 antibody closely resembles gp39/CD40 ligand in its ability to stimulate

proliferation of small, resting B lymphocytes in the absence of other cofactors. (Ref.2)

Uniprot ID: P27512

NCBI: NP 035741.2

GeneID: 21939

Host / Isotype: Rat / IgG2a

Clone: 1C10

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

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

Label: PE - R-Phycoerythrin

Flow Cytometry: $\langle / 0.5 \mu g / 10e6 \text{ cells.}$ (Ref.2) **Applications:**

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

be determined by the user.

Specificity: This antibody is specific to Mouse CD40 (Mr. 45-50 kDa)

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. Santos-Argumedo, L., J. Gordon, A.W. Heath, and M. Howard. 1994. Cell. Immunol. 156:272.
- 2. Heath, A.W., W.W. Wu, and M.C. Howard. 1994. Eur. J. Immunol. 24:1828.
- 3. Hasbold, J., C. Johnson-Leger, C.J. Atkins, E.A. Clark, and G.G. Klaus. 1994. Eur. J. Immunol. 24:1835.
- 4. Grandien, A., A. Bras, and C. Martinez. 1996. Scand. J. Immunol. 43:47.
- 5. Noelle, R.J., J.A. Ledbetter, and A. Aruffo. 1994. Immunol. Today 13:431.
- 6. Clark, E.A., and J.A. Ledbetter. 1994. Nature 367:425.

