

## Product datasheet for **AM08042RP-S**

### **Cd40 Rat Monoclonal Antibody [Clone ID: 1C10]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	1C10
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> < / 0.5 µg/10e6 cells. (Ref.2)
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	This antibody is specific to Mouse CD40 (Mr. 45-50 kDa)
Formulation:	PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. Label: PE State: Liquid purified Ig fraction. Label: R-Phycoerythrin
Concentration:	lot specific
Conjugation:	PE
Storage:	Store the antibody undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD40 antigen
Database Link:	<u><a href="#">Entrez Gene 21939 Mouse P27512</a></u>



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**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)

**Synonyms:**

TNFRSF5, CDw40, Bp50