

Product datasheet for **TA386234**

Cd40Ig Monoclonal Antibody [Clone ID: MR1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MR1
Applications:	BI, FC, FN
Reactivity:	Mouse
Isotype:	IgG, kappa
Clonality:	Monoclonal
Immunogen:	This antibody was raised by immunising Armenian hamsters with murine activated Th1 (D1.6) plasma membrane as described by Noelle et al (1992).
Specificity:	<p>This antibody is specific for murine CD40 ligand (CD40L), a 39 kDa transmembrane glycoprotein. CD40L is expressed transiently by activated T cells. Through its binding to CD40 on antigen presenting cells (APC) including B cells, monocytes/macrophages, and dendritic cells, it serves a crucial function in T cell-APC cognate interaction. CD40L-interaction with CD40 transduces signals for T-dependent B cell activation and induces B cells to enter the cell cycle.</p> <p>This antibody has been used in various FACS analyses for diverse immunological applications, such as to indicate how naive CD4 T cells constitutively express CD40L and augment autoreactive B cell survival (Lesley et al, 2006), to prove that the interaction between natural killer cells and dendritic cells has a pivotal role in the sensitization phase of contact hypersensitivity (Shimizuhira et al, 2014), and to demonstrate that enhanced CD8 T cell responses through GITR-mediated costimulation could resolve chronic viral infection (Pascutti et al, 2015). This antibody has also been used for in vitro and in vivo blocking and functional studies, for instance, to indicate that the 39-kDa CD40L membrane protein expressed on activated Th is a binding protein for CD40 and functions to transduce the signal for Th-dependent B-cell activation (Noelle et al, 1992), and to demonstrate that the CD40L-CD40 pathway can augment the survival of autoantigen-engaged B cells in the absence of T cell activation (Lesley et al, 2006). Furthermore, this antibody clone (MR1) has been re-formatted as a rat IgG2b version and used for in vivo functional assays to suggest that short pulses of anti-CD40L antibody therapy may still be useful in tolerance protocols even when the Fc region is disabled (Daley et al, 2008).</p>
Formulation:	PBS with 0.02% Proclin 300.



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Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	CD40 ligand
Database Link:	Entrez Gene 21947 Mouse P27548
Synonyms:	CD40-L; CD40L; CD154; gp39; hCD40L; HIGM1; IGM; IMD3; T-BAM; TNFSF5; TRAP