

## **Product datasheet for TA386203**

## Cd80 Rat Monoclonal Antibody [Clone ID: RM80]

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: RM80

**Applications:** BI, FC, FN, IHC, WB

**Reactivity:** Mouse

Host: Rat

Isotype: IgG2a, kappa
Clonality: Monoclonal

Immunogen: This antibody was raised by immunising Sprague Dawley rats with a mouse B cell line, BCL1

and fusing immune splenocytes with P3U1 myeloma cells.

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Specificity:

This antibody is specific for murine CD80, a  $\sim$ 55 kDa member of the Ig superfamily. CD80 is expressed by macrophages, dendritic cells, activated B cells, and activated T cells. CD80 has high affinity for binding to two T cell surface antigens, CD28 and CD152 (CTLA-4). The interaction of CD28 and CD152 with CD80 is crucial in T-B cell communication leading to the activation of T and B cells, respectively.

This antibody has been used in multiple FACS experiments for various immunological applications, such as to highlight the robustness of the T cell priming process by activated NIrc5-deficient dendritic cells (Rota et al, 2016), to demonstrate that allogeneic IgG combined with dendritic cell stimuli could induce anti-tumor T cell immunity (Carmi et al, 2015), to confirm the role of aquaporin-9-expressing neutrophils for the development of contact hypersensitivity (Moniaga et al, 2015), and to support the therapeutic potential of targeting Bcell Syk signaling in chronic graft-versus-host disease (Flynn et al, 2015). This antibody has also been used in Western Blot to study the effect of interleukin 4-induced gene-1 (IL4I1) overexpression on the expression of M2 markers and M1-associated cytokines (Yue et al, 2015), as well as in in vitro blocking experiments to confirm the role of CD28 signals for IL-2mediated survival and proliferation of both CD27(+) and CD27(-) yδ T cell subsets (Ribot et al, 2012). Furthermore, this antibody has been used, together with the anti-CD86 antibody, in numerous in vivo studies, such as in a NZB/W F1 mouse lupus model to clarify the role of CD80 and CD86 in murine Ab-mediated autoimmunity (Nakajima et al, 1995), in graft bearing recipient BALB/c mice to evaluate the roles of CD80 and CD86 costimulatory molecules in corneal allograft rejection (Kagaya et al, 2002), and in transgenic BALB/c mice to demonstrate the critical contribution of CD80 and CD86 in anterior chamber-associated immune deviation (Tsukahara et al, 2005).

**Formulation:** PBS with 0.02% Proclin 300.

**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: CD80 antigen

Database Link: Entrez Gene 12519 Mouse

Q00609

Synonyms: B7; BB1; CD28LG; CD28LG1; LAB7