

Datasheet for ABIN2688993
anti-CD40 Ligand antibody

23 Publications



[Go to Product page](#)

Overview

Quantity:	0.5 mg
Target:	CD40 Ligand (CD40LG)
Reactivity:	Mouse
Host:	Armenian Hamster
Clonality:	Monoclonal
Conjugate:	This CD40 Ligand antibody is un-conjugated
Application:	Flow Cytometry (FACS), Blocking Reagent (BR), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Brand:	BD Pharmingen™
Immunogen:	Activated mouse Th1 clone D1.6
Clone:	MR1
Isotype:	IgG3 kappa
Characteristics:	The MR1 antibody reacts with CD154 (CD40 Ligand, gp39), an accessory molecule expressed on activated T helper (CD4+) lymphocytes. CD154 has also been detected on other types of leukocytes, including CD8+ T cells, medullary thymocytes, activated CD4+ NK-T cells, and human NK cells. CD154 plays an important role in costimulatory interactions between T and B lymphocytes and between antigen-presenting cells and lymphocytes, regulating the immune response at multiple levels. MR1 mAb inhibits in vitro activation of B lymphocytes by T helper cells by blocking interaction of gp39 with CD40. In vitro interactions of T cells and antigen-

Product Details

presenting cells can also be blocked by the MR1 antibody. In vivo treatment with MR1 antibody blocks the development of experimental autoimmune disease, inhibits formation of germinal centers and generation of memory B cells, reduces T-lymphocyte responses to allogeneic cells and allografts, prevents intrathymic deletion of self-reactive T lymphocytes, and disrupts antigen-specific T-cell responses. CD154 expression on activated and resting T lymphocytes. BALB/c spleen T cells, purified on a T Cell Enrichment Column (R&D Systems), were cultured for 8 hours in the presence (Panels A and C) or absence (Panel B) of plate-bound 500A2 antibody (anti-CD3e, Cat. No. 553238). They were stained with purified MR1 antibody (Panels A and B), followed by biotinylated mouse anti-hamster IgG, Cat. No. 554010, then Streptavidin-PE, Cat. No. 554061, (Panels A, B, and C). Flow cytometry was performed on a BD FACScan™

BD Pharmingen™ Purified Hamster Anti-Mouse CD154 - Purified - Clone MR1 - Isotype Armenian Hamster IgG3, κ - Reactivity Ms - 0.5 mg

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
---------------	---

Target Details

Target:	CD40 Ligand (CD40LG)
Alternative Name:	CD154 (CD40LG Products)
Background:	Synonyms: CD40 Ligand, gp39
Pathways:	NF-kappaB Signaling , Production of Molecular Mediator of Immune Response , Cancer Immune Checkpoints

Application Details

Application Notes:	Flow Cytometry System.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

should be handled by trained staff only.

Storage: 4 °C

Storage Comment: Store undiluted at 4°C.

Publications

Product cited in: Miga, Masters, Durell, Gonzalez, Jenkins, Maliszewski, Kikutani, Wade, Noelle: "Dendritic cell longevity and T cell persistence is controlled by CD154-CD40 interactions." in: **European journal of immunology**, Vol. 31, Issue 3, pp. 959-65, (2001) ([PubMed](#)).

Graca, Honey, Adams, Cobbold, Waldmann: "Cutting edge: anti-CD154 therapeutic antibodies induce infectious transplantation tolerance." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 165, Issue 9, pp. 4783-6, (2000) ([PubMed](#)).

Lettesjö, Burd, Mageed: "CD4+ T lymphocytes with constitutive CD40 ligand in preautoimmune (NZB x NZW)F1 lupus-prone mice: phenotype and possible role in autoreactivity." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 165, Issue 7, pp. 4095-104, (2000) ([PubMed](#)).

Tomura, Yu, Ahn, Yamashita, Yang, Ono, Hamaoka, Kawano, Taniguchi, Koezuka, Fujiwara: "A novel function of Valpha14+CD4+NKT cells: stimulation of IL-12 production by antigen-presenting cells in the innate immune system." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 163, Issue 1, pp. 93-101, (1999) ([PubMed](#)).

Garside, Ingulli, Merica, Johnson, Noelle, Jenkins: "Visualization of specific B and T lymphocyte interactions in the lymph node." in: **Science (New York, N.Y.)**, Vol. 281, Issue 5373, pp. 96-9, (1998) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)