Datasheet for ABIN1302930

anti-CD40 Ligand antibody (FITC)

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Overview

Quantity:	0.1 mg
Target:	CD40 Ligand (CD40LG)
Reactivity:	Mouse
Host:	Armenian Hamster
Clonality:	Monoclonal
Conjugate:	This CD40 Ligand antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Activated mouse Th1 clone D1.6
Clone:	MR-1
Isotype:	IgG1
Specificity:	The Armenian hamster monoclonal antibody MR-1 detects an extracellular epitope on murine CD154 / CD40L (CD40-ligand), a 39 kDa cell surface type II glycoprotein expressed predominantly on activated CD4+ lymphocytes.
Cross-Reactivity (Details):	Mouse
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD40 Ligand (CD40LG)
Alternative Name:	CD154 / CD40L (CD40LG Products)
Background:	CD40 ligand,CD154 / CD40L (CD40 ligand) is a member of the tumor necrosis factor family, and is expressed primarily on activated CD4+ lymphocytes, but also on mast cells, basophils, eosinophils and human dendritic cells. Its counter-receptor CD40 is expressed on antigen presenting cells, including dendritic cells, macrophages, and B cells, and also on fibroblasts. Triggering of CD40 by CD40L causes maturation of dendritic cells and upregulation of antigen presentation in functions of the MHC and costimulatory molecules. CD40L also functions as a direct stimulating factor for T cells. CD40L plays also roles e.g. in antibody class switching and modulation of apoptosis in the germinal center.,CD40L, CD40 ligand, TNFSF5, Ly62, gp39, T-BAM
Gene ID:	959
UniProt:	P29965
Pathways:	NF-kappaB Signaling, Production of Molecular Mediator of Immune Response, Cancer Immune Checkpoints

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 2-3 µg/mL, positive control: 6-8 hour activated murine splenocytes.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.

Handling

Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Shin, Kennedy, Gorski, Tsuchiya, Koseki, Azuma, Yagita, Chen, Powell, Pardoll, Housseau: " Cooperative B7-1/2 (CD80/CD86) and B7-DC costimulation of CD4+ T cells independent of the PD-1 receptor." in: **The Journal of experimental medicine**, Vol. 198, Issue 1, pp. 31-8, (2003) (PubMed).

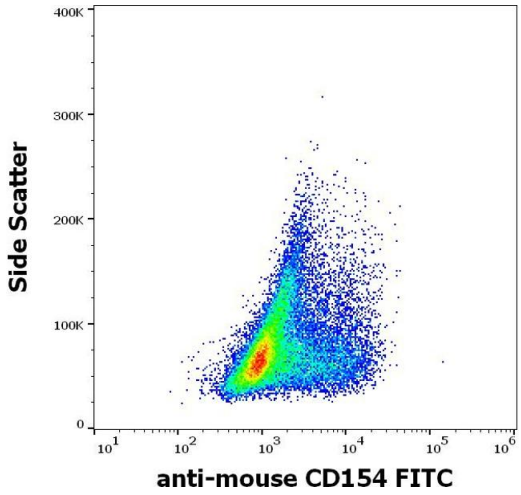
Luzina, Atamas, Storrer, daSilva, Kelsoe, Papadimitriou, Handwerger: "Spontaneous formation of germinal centers in autoimmune mice." in: **Journal of leukocyte biology**, Vol. 70, Issue 4, pp. 578-84, (2001) (PubMed).

Hwang, Nahm, Briles, Thomas, Purkerson: "Acquired, but not innate, immune responses to Streptococcus pneumoniae are compromised by neutralization of CD40L." in: **Infection and immunity**, Vol. 68, Issue 2, pp. 511-7, (2000) (PubMed).

Lode, Xiang, Pertl, Förster, Schoenberger, Gillies, Reisfeld: "Melanoma immunotherapy by targeted IL-2 depends on CD4(+) T-cell help mediated by CD40/CD40L interaction." in: **The Journal of clinical investigation**, Vol. 105, Issue 11, pp. 1623-30, (2000) (PubMed).

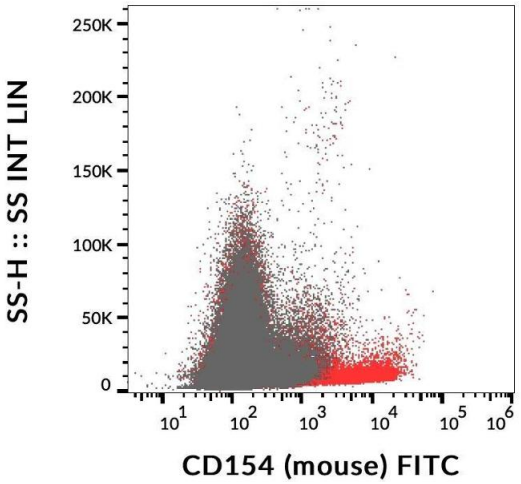
Howard, Miga, Vanderlugt, Dal Canto, Laman, Noelle, Miller: "Mechanisms of immunotherapeutic intervention by anti-CD40L (CD154) antibody in an animal model of multiple sclerosis." in: **The Journal of clinical investigation**, Vol. 103, Issue 2, pp. 281-90, (1999) (PubMed).

There are more publications referencing this product on: Product page



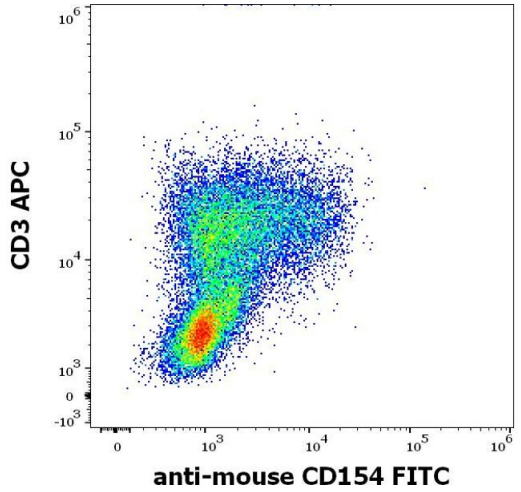
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine stimulated (PMA + Ionomycin) splenocyte suspension stained using anti-mouse CD154 (MR-1) FITC antibody (concentration in sample 1 µg/mL).



Flow Cytometry

Image 2. Surface staining of activated murine splenocytes (PHA + PMA + ionomycin for 6 hours) using anti-CD154 (MR-1) FITC.



Flow Cytometry

Image 3. Flow cytometry multicolor surface staining pattern of murine stimulated (PMA + Ionomycin) lymphocytes using anti-mouse CD154 (MR-1) FITC antibody (concentration in sample 1 µg/mL) and anti-mouse CD3 (145-2C11) APC antibody (concentration in sample 2 µg/mL).

Please check the product details page for more images. Overall 4 images are available for ABIN1302930.