

Datasheet for ABIN2752002
anti-CD40 Ligand antibody



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Overview

Quantity:	0.1 mg
Target:	CD40 Ligand (CD40LG)
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Application:	Flow Cytometry (FACS), Immunocytochemistry (ICC), Functional Studies (Func)

Product Details

Immunogen:	human CD154 fusion protein
Clone:	24-31
Isotype:	IgG1
Specificity:	The mouse monoclonal antibody 24-31 detects an extracellular epitope of CD154 / CD40L (CD40-ligand), a 39 kDa cell surface type II glycoprotein expressed predominantly on activated CD4+ lymphocytes.
Cross-Reactivity (Details):	Human, Non-Human Primates
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)
Endotoxin Level:	Endotoxin level is less than 0.01 EU/μg of the protein, as determined by the LAL test.

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:	21947
UniProt:	P27548
Pathways:	NF-kappaB Signaling , Production of Molecular Mediator of Immune Response , Cancer Immune Checkpoints

Application Details

Application Notes:	Functional application: Blocking. Flow cytometry: Recommended dilution: 2-6 µg/mL
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4
Preservative:	Azide free
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

Product cited in:	Fernandes, Gomes, Butcher, Hernandez-Alcoceba, Chang, Kansopon, Newman, Stone, Tong: " Growth inhibition of human multiple myeloma cells by an oncolytic adenovirus carrying the
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CD40 ligand transgene." in: **Clinical cancer research : an official journal of the American Association for Cancer Research**, Vol. 15, Issue 15, pp. 4847-56, (2009) ([PubMed](#)).

Kum, Hung, Cameron, Chow et al.: "Temporal sequence and functional implications of V beta-specific T cell receptor down-regulation and costimulatory molecule expression following in vitro stimulation with the staphylococcal ..." in: **The Journal of infectious diseases**, Vol. 185, Issue 4, pp. 555-60, (2002) ([PubMed](#)).

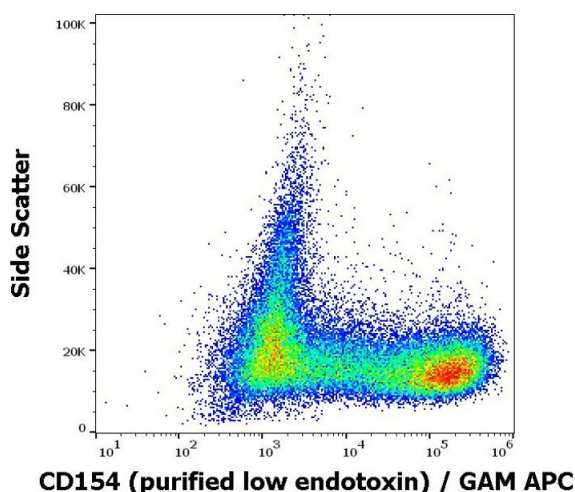
Brams, Black, Padlan, Hariharan, Leonard, Chambers-Slater, Noelle, Newman: "A humanized anti-human CD154 monoclonal antibody blocks CD154-CD40 mediated human B cell activation." in: **International immunopharmacology**, Vol. 1, Issue 2, pp. 277-94, (2001) ([PubMed](#)).

Berner, Wolf, Hummel, Müller, Reuss-Borst: "Increased expression of CD40 ligand (CD154) on CD4+ T cells as a marker of disease activity in rheumatoid arthritis." in: **Annals of the rheumatic diseases**, Vol. 59, Issue 3, pp. 190-5, (2000) ([PubMed](#)).

Barnhart, Ford, Bhushan, Song, Covey: "A polymorphic CD40 ligand (CD154) molecule mediates CD40-dependent signalling but interferes with the ability of soluble CD40 to functionally block CD154:CD40 interactions." in: **Immunology**, Vol. 99, Issue 1, pp. 54-61, (2000) ([PubMed](#)).

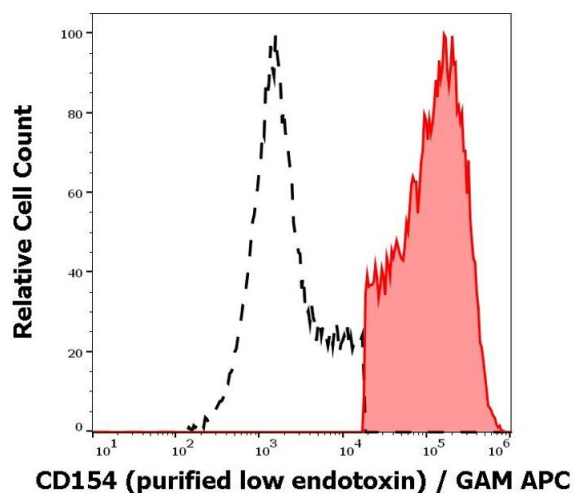
There are more publications referencing this product on: [Product page](#)

Images



Flow Cytometry

Image 1. Flow cytometry surface staining pattern of stimulated (PMA + ionomycin) peripheral blood mononuclear cells stained using anti-human CD154 (24-31) purified antibody (low endotoxin, concentration in sample 2 µg/mL) GAM APC.



Flow Cytometry

Image 2. Separation of human CD154 positive cells (red-filled) from CD154 negative cells (black-dashed) in flow cytometry analysis (surface staining) of stimulated (PMA + ionomycin) peripheral blood mononuclear cells stained using anti-human CD154 (24-31) purified antibody (low endotoxin, concentration in sample 2 $\mu\text{g/mL}$) GAM APC.