

# CD154 (CD40 Ligand) Monoclonal Antibody (24-31), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Cynomolgus monkey, Human
Published Species	Non-human primate, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	24-31
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467520

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	4 Publications
Neutralization (Neu)	Assay-Dependent	-
Functional Assay (FN)	Assay-Dependent	-
Inhibition Assays (IA)	-	1 Publication

## Product Specific Information

**Description:** The 24-31 monoclonal antibody reacts with human CD154, a 39 kDa transmembrane glycoprotein also known as gp39 and CD40 ligand (CD40L). CD154 is a member of the TNF superfamily and is expressed transiently by activated T cells. Through its binding to CD40 on antigen presenting cells including B cells, monocytes/macrophages and dendritic cells, CD154 serves a crucial function in T-APC cognate interaction. CD154 interaction with CD40 transduces signals for T-dependent B-cell activation and induces B cell cycle entry. 24-31 cross-reacts with the cynomolgus monkey CD154.

**Applications Reported:** 24-31 has been reported for use in flow cytometric analysis. 24-31 has also been reported to block CD154 binding to CD40 and inhibit T cell-dependent B cell differentiation and antibody response in vitro . (Please use Functional Grade Purified 24-31, cat. 16-1548, in functional assays.).

**Applications Tested:** The 24-31 antibody has been tested by flow cytometric analysis of resting and activated human normal human peripheral blood cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

5 References

Flow Cytometry (4)

Cell	Year 2021
<b>Functional SARS-CoV-2-Specific Immune Memory Persists after Mild COVID-19.</b> "Published figure using CD154 (CD40 Ligand) monoclonal antibody (Product # 14-1548-82) in Flow Cytometry" Authors: Rodda LB,Netland J,Shehata L,Pruner KB,Morawski PA,Thouvenel CD,Takehara KK,Eggenberger J,Hemann EA,Waterman HR,Fahning ML,Chen Y,Hale M,Rathe J,Stokes C,Wrenn S,Fiala B,Carter L,Hamerman JA,King NP, Gale M,Campbell DJ,Rawlings DJ,Pepper M	
Oncology letters	Year 2018
<b>Photodynamic therapy reduces the inhibitory effect of osteosarcoma cells on dendritic cells by upregulating HSP70.</b> "Published figure using CD154 (CD40 Ligand) monoclonal antibody (Product # 14-1548-82) in Flow Cytometry" Authors: Zhang F,Zhu Y,Fan G,Hu S	

View more Flow references on thermofisher.com

Inhibition Assays (1)

Leukemia research	Year 2010
<b>Comparative analysis of MVA-CD40L and MVA-TRICOM vectors for enhancing the immunogenicity of chronic lymphocytic leukemia (CLL) cells.</b> "14-1548 was used in Blocking experiments to compare the immunogenicity-enhancing properties of modified vaccinia virus strain Ankara encoding either CD40L or LFA-3 (TRICOM)." Authors: Litzinger MT,Foon KA,Tsang KY,Schlom J,Palena C	Species Human

More applications with references on thermofisher.com

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