
PRODUCT INFORMATION

Catalog Number	C1004
Cell Line Name	Human CD40 ligand (CD40L)-EL4 stable cell pool
Gene Synonyms	Human CD40 ligand or CD40L, CD154, TNFSF5, TRAP, gp39
Gene Sequence	P29965.1
Host Cell	Mouse EL-4
Quantity	Two vials of frozen cells (5x10 ⁶ per vial)
Stability	>10 passages
Culture Medium	RPMI with 10% FBS and 1 µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen
Mycoplasma Test	Negative
Applications	Antibody binding analysis by flow cytometry, IHC, or western blot; CD40:CD40L interaction analysis; <i>In vitro</i> B cell stimulation.

BACKGROUND

CD40 ligand, CD40L (also known as CD154, TRAP or gp39), is a 261 amino acid type II transmembrane glycoprotein belonging to the TNF family, CD40L is expressed predominantly on activated CD4⁺ T lymphocytes, and also found in other types of cells, like NK cells, mast cells, basophils and eosinophils. Human CD40L shares 78% amino acid identity with its murine counterpart. The receptor of CD40L is CD40, a type I transmembrane glycoprotein belonging to the TNF receptor family. CD40 is expressed on B lymphocytes, monocytes, dendritic cells and thymic epithelium. Although all monomeric, dimeric and trimeric forms of soluble CD40L can bind to CD40, the trimeric form of soluble CD40L has the most potent biological activity through oligomerization of cell surface CD40, a common feature of TNF receptor family members. CD40L mediates a range of activities on B cells including induction of activation-associated surface antigen, entry into cell cycle, isotype switching and Ig secretion and memory generation. CD40-CD40L interaction also plays important roles in monocyte activation and dendritic cell maturation.

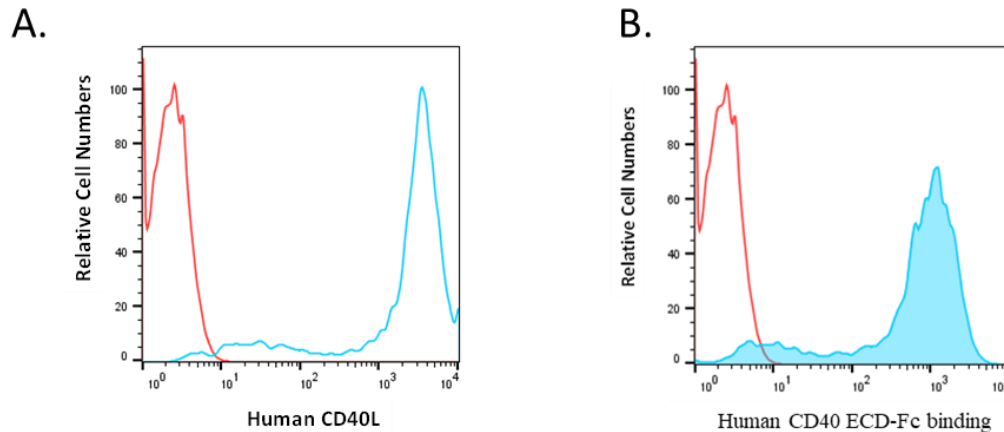
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Human CD40L-EL4 Stable Cell Pool

REPRESENTATIVE DATA

A. Detection of human CD40L expression on human CD40L-EL-4 stable cells using a mouse monoclonal antibody specific for human CD40L (BioLegend Cat. #310805); B. Detection of human CD40 binding to human CD40L-EL-4 stable cells using a human CD40 ECD-Fc protein followed by staining with PE-anti-human IgG.



REFERENCES

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