

# Anti-CD40L (Ruplizumab), Human IgG1 Antibody

Catalog # ABV11788

## Product Information

Application	FC
Primary Accession	<a href="#">P29965</a>
Reactivity	Human
Host	Recombinant
Clonality	Monoclonal
Isotype	Human IgG1, kappa
Calculated MW	29274

## Additional Information

Gene ID	959
Alias Symbol	CD40LG
Other Names	CD40 ligand; tumour necrosis factor ligand superfamily member 5; TNFSF5; CD154; tumour necrosis factor related activation protein; TRAP
Appearance	Colorless liquid
Formulation	200 µg affinity purified human antibody in phosphate-buffered saline (PBS) containing 0.02% Proclin 300
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-CD40L (Ruplizumab), Human IgG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	CD40LG
Synonyms	CD40L, TNFSF5, TRAP
Function	Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed: <a href="#">1280226</a> , PubMed: <a href="#">31331973</a> ). Costimulates T-cell proliferation and cytokine production (PubMed: <a href="#">8617933</a> ). Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation (PubMed: <a href="#">8617933</a> ). Induces the activation of NF-kappa-B (PubMed: <a href="#">15067037</a> , PubMed: <a href="#">31331973</a> ). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed: <a href="#">15067037</a> ). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed: <a href="#">15067037</a> ). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (By similarity). Involved in immunoglobulin class switching

(By similarity).

<b>Cellular Location</b>	Cell membrane; Single-pass type II membrane protein. Cell surface
<b>Tissue Location</b>	Specifically expressed on activated CD4+ T- lymphocytes

## Background

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Cytokine that binds to CD40/TNFRSF5. Costimulates T-cell proliferation and cytokine production. Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation. Induces the activation of NF-kappa-B and kinases MAPK8 and PAK2 in T-cells. Induces tyrosine phosphorylation of isoform 3 of CD28. Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4. Involved in immunoglobulin class switching. The antibody binds specifically to CD40L, a surface receptor expressed on activated T cells which acts as a costimulatory molecule to trigger immune responses. The antibody neutralizes CD40L function, as it blocks the interaction between CD40 and CD40L. When injected into cynomolgus monkeys, the antibody was found to have a T1/2 of 531  $\pm$  155 hours.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.