

**CD154**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2711a****Specification**

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**CD154 - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | <b>E, WB</b>           |
| Primary Accession | <a href="#">P29965</a> |
| Reactivity        | <b>Human</b>           |
| Host              | <b>Mouse</b>           |
| Clonality         | <b>Monoclonal</b>      |
| Isotype           | <b>Mouse IgG2a</b>     |
| Calculated MW     | <b>29.3kDa KDa</b>     |

**Immunogen**

Purified recombinant fragment of human CD154 (AA: extra 47-261) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CD154 - Additional Information**

**Gene ID** 959

**Other Names**

CD40LG; IGM; IMD3; TRAP; gp39; CD40L; HIGM1; T-BAM; TNFSF5; hCD40L

**Dilution**

E~~ 1/10000

WB~~ 1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD154 is for research use only and not for use in diagnostic or therapeutic procedures.

**CD154 - Protein Information**

**Name** CD40LG

**Synonyms** CD40L, TNFSF5, TRAP

**Function**

Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed:<a href="http://www.uniprot.org/citations/1280226" target="\_blank">1280226</a>, PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">31331973</a>). Costimulates

T-cell proliferation and cytokine production (PubMed:<a href="http://www.uniprot.org/citations/8617933" target="\_blank">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="http://www.uniprot.org/citations/8617933" target="\_blank">8617933</a>). Induces the activation of NF-kappa-B (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>, PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">31331973</a>). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">15067037</a>). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:<a href="http://www.uniprot.org/citations/15067037" target="\_blank">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).

**Cellular Location**

Cell membrane; Single-pass type II membrane protein. Cell surface

**Tissue Location**

Specifically expressed on activated CD4+ T- lymphocytes

**CD154 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CD154 - Images**

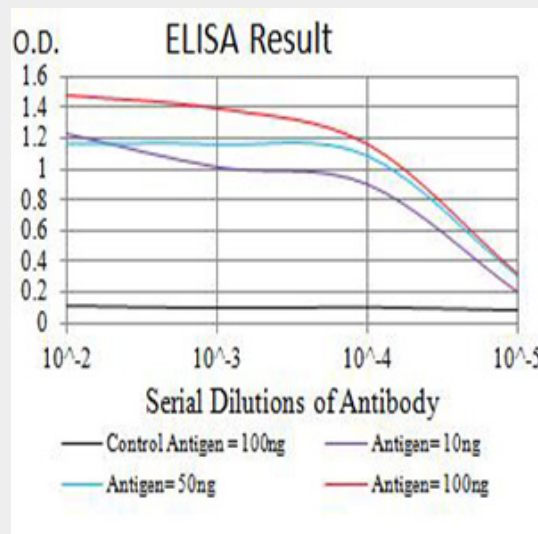


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

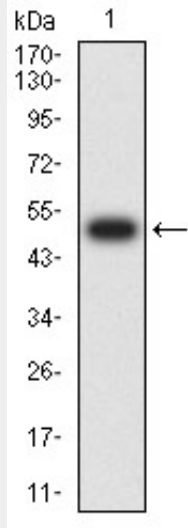


Figure 2:Western blot analysis using CD154 mAb against human CD154 (AA: extra 47-261) recombinant protein. (Expected MW is 50 kDa)

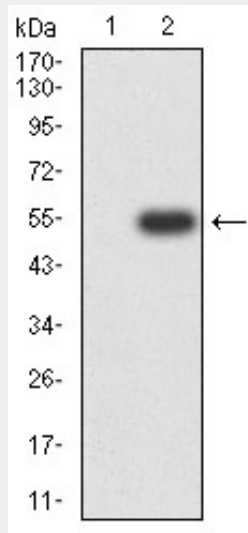


Figure 3:Western blot analysis using CD154 mAb against HEK293 (1) and CD154 (AA: extra 47-261)-hlgGfc transfected HEK293 (2) cell lysate.

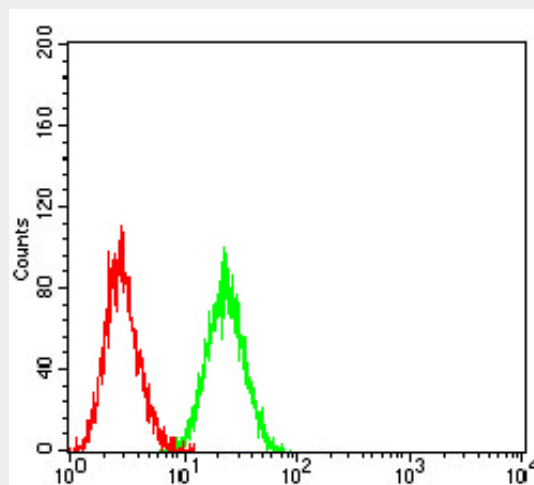


Figure 4:Flow cytometric analysis of Ramos cells using CD154 mouse mAb (green) and negative

control (red).

### **CD154 - References**

1.Hematology. 2016 Apr;21(3):187-92. 2.Mol Cell Probes. 2015 Dec;29(6):335-342.