

## 30-1564PE-Cy7: PE-Cy7 Conjugated Anti-CD154 / CD40L Monoclonal Antibody (Clone: 24-31)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	24-31
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD40LG
<b>Gene ID :</b>	959
<b>Uniprot ID :</b>	P29965
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CD40LG,CD40L,TNFSF5,TRAP,T-BAM,Ly62,gp39
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	human CD154 fusion protein

### Description

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.

### Product Info

<b>Amount :</b>	100 Tests
<b>Purification :</b>	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C protected from light. Do not freeze.

### Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

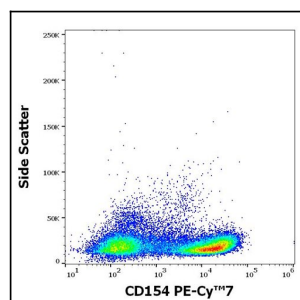


Figure 1: Flow cytometry surface staining pattern of human stimulated (PMA + Ionomycin) peripheral blood mononuclear cells stained using anti-human CD154 (24-31) PE-Cy7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

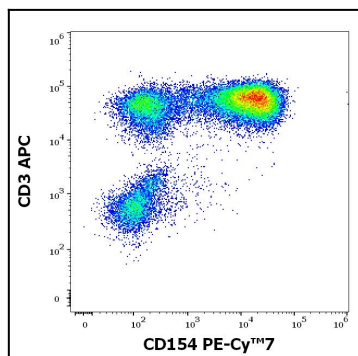


Figure 2: Flow cytometry multicolor surface staining pattern of human stimulated (PMA + Ionomycin) lymphocytes stained using anti-human CD3 (UCHT1) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD154 (24-31) PE-Cy7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

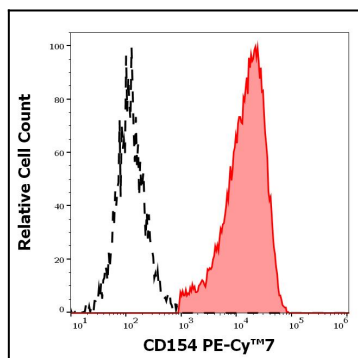


Figure 3: Separation of human CD154 positive CD3 positive T cells (red-filled) from CD154 negative CD3 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human stimulated (PMA + Ionomycin) peripheral blood mononuclear cells stained using anti-human CD154 (24-31) PE-Cy7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).