

## CD154 (5C8)

Type	Size	Catalog number
iFluor™488	25 tests	1068114
	100 tests	1068115
	200 tests	1068116

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<b>Antigen:</b>	CD154
<b>Immunogen:</b>	Human D1.1 T cell line
<b>Host/Isotype:</b>	Mouse, IgG2a, κ
<b>Reactivity:</b>	Human
<b>Purity:</b>	>90% pure tested via polyacrylamide gel electrophoresis (PAGE)
<b>Formulation:</b>	PBS, pH7.2, 0.09% NaN <sub>3</sub> (unconjugated, Biotin) PBS, pH7.2, 0.09% NaN <sub>3</sub> , 0.2% (w/v) BSA (conjugated)
<b>Storage:</b>	Store at 2-8°C and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Applications:</b>	Flow Cytometry

### Application Information

Each lot of these antibodies has been pre-titrated and tested by flow cytometric analysis of Jurkat cell line such that 0.5µg (unconjugated, Biotin) or 5µl (conjugated) of these products are sufficient for staining 1 million cells in a 100µl staining volume or 100µl of whole blood. It is recommended to titrate antibody reactivity empirically for optimal performance.

### Antigen Information

The clone 5C8, a mouse monoclonal antibody, specifically recognizes a ~30-33 kDa activation-induced human CD4+ T cells surface molecule known as CD154 or CD40 ligand (CD40L). The CD40 interacts with CD154 through T cell-B cell activating molecule, gp39, TNF cytokine related activation protein. CD154 is primarily expressed on the surface of activated CD4+ T cells but can also be expressed by platelets, mast cells, macrophages, basophils, NK cells, B cells, CD8+ T cells as well as non-hematopoietic cells including smooth muscle cells, endothelial cells, and epithelial cells. CD154 plays important roles in the pathogenesis of certain blood cancer such as the CD4+ T cells of patients with CLL fail to express surface CD154 antigen even after CD3 ligation, and proximal and distal activation events are required for the neonatal CD4+ T cells for the CD154 gene transcription to establish the normal immune system.

### References

1. Yellin, MJ., et al. 1995. *J. Exp. Med.* 182:1857-1864
2. Grammer, AC., et al. 1995. *J. Immunol.* 154:4996-5010.
3. Cantwell, M. et al. 1997. *Nature Medicine.* 3:984-989.
4. Jullien, P, et al. 2003. *Int. Immunol.* 15:1461-1472.

### Terms and Conditions

This product is for research use only (RUO) and not intended for diagnostic testing.