

# Anti-Mouse CD154-170Er

Catalog: 3170011B

Package Size: 100 tests

Storage: Store product at 4°C. Do not freeze.

Reactivity: Mouse,

Clone: MR1

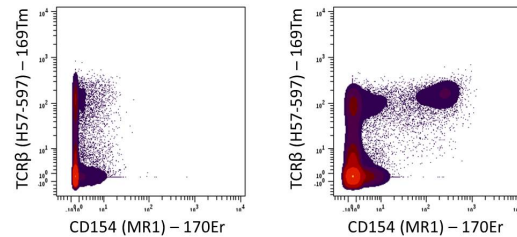
Isotype: IgG

Formulation: Antibody stabilizer with 0.05% Sodium Azide

## Technical Information

**Validation:** Each lot of conjugated antibody is quality control tested by CyTOF<sup>®</sup> analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

**Recommended Usage:** The suggested use is 1 µl for up to 3 X 10<sup>6</sup> live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Mouse splenocytes were incubated for 6 hours in media alone (left) or with PMA and Ionomycin (right). Cells were then stained with 169Tm anti-TCRβ (H57-597) and 170Er anti-CD154 (CD40L) (MR1). Total viable cells are displayed in the analysis.

## Description

CD154, also known as CD40 ligand (CD40L), is a 39 kDa type II membrane glycoprotein of the TNF family. It has been reported that CD154 binding with its ligand, CD40, is required for the proteolysis of membrane-bound CD154 and the subsequent release of soluble CD154 (sCD154) by activated platelets. Soluble CD154 is an 18 kDa fragment comprised of residues 113–261 of the membrane-bound CD154 molecule and remains a functional trimer retaining its ability to bind receptors. The CD154 homotrimer is nonconstitutively expressed on different cell types, including activated T lymphocytes, basophils, eosinophils, monocytes, macrophages, natural killer cells, B lymphocytes, platelets, dendritic cells, as well as endothelial, smooth muscle, and epithelial cells. Accumulating evidence now indicates that CD154 can bind to receptors other than CD40, namely, the integrins αIIbβ3, α5β1, and αMβ2.

## References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Ornatsky, O. I., et al. **Highly Multiparametric Analysis by Mass Cytometry.** *J Immunol Methods* 361 (1-2):1-20, 2010.

### For technical support visit [fluidigm.com/support](http://fluidigm.com/support)

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