## **Product Data Sheet**

## Alexa Fluor® 700 anti-human CD154

**Catalog** # / 2154230 / 100 tests

**Size:** 2154225 / 25 tests

**Clone:** 24-31

**Isotype:** Mouse IgG1, κ

Reactivity: Human, Non-human primate, Other

**Preparation:** The antibody was purified by affinity

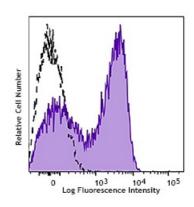
chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



PMA+ionomycin-stimulated (6 hours) human peripheral blood lymphocytes were stained with CD154 (clone 24-31) Alexa Fluor® 700 (filled histogram) or Mouse IgG1, κ Alexa Fluor® 700 isotype control (open histogram).

## **Applications:**

**Applications:** Flow Cytometry

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ l per million cells or 5  $\mu$ l per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes:

Additional reported applications (for the relevant formats) include: immunofluorescence microscopy  $^{1,3}$  and blocking of T cell-dependent B cell differentiation  $^{1,2,4,5}$ .

Application References:

1. Najafian N, et al. 2003. Expert Opin. Biol. Ther. 3:227. 2. Racke M, et al. 2002. Expert Opin. Ther. Targets. 6:275.

3. Ford G, et al. 1999. J. Immunol. 162:4037.

**Description:** CD154 (CD40 ligand) is also known as CD40L, gp39, TRAP and T-BAM. CD40

ligand is a 32-39 kD type II transmembrane glycoprotein. It is a member of the TNF superfamily and is expressed on activated T cells. It has been reported to be important for B cell costimulation following binding of its receptor, CD40. Additionally, binding of CD40L to CD40 on B cells promotes the secretion of immunoglobulin and Ig isotype switching. CD40L is also

involved in the regulation of cytokine production by T cells.

Antigen References:

1. Najafian N, et al. 2003. Expert Opin. Biol. Ther. 3:227. 2. Racke M, et al. 2002. Expert Opin. Ther. Targets. 6:275.

3. Ford G, et al. 1999. J. Immunol. 162:4037.

