Technical Data Sheet

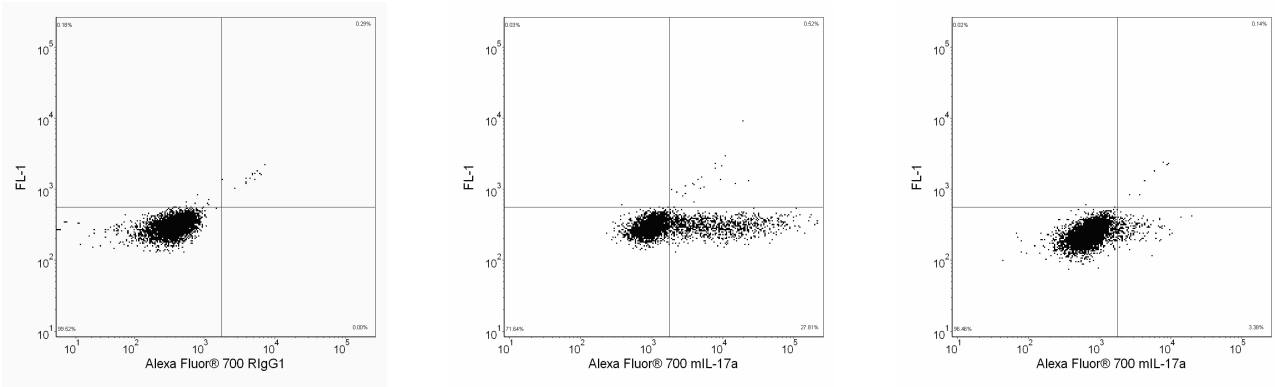
Alexa Fluor® 700 Rat Anti-Mouse IL-17A

Product Information

Material Number:	**560820**
Alternate Name:	Interleukin-17A; Il17a; Cytotoxic T-lymphocyte-associated antigen; CTLA-8
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	TC11-18H10
Immunogen:	Recombinant Mouse IL-17A Protein
Isotype:	Rat (LEW) IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The TC11-18H10 antibody reacts with recombinant and natural mouse IL-17A proteins. IL-17A, also known as CTLA-8, is a T cell-derived cytokine that promotes inflammatory responses. Mouse IL-17A is a proinflammatory cytokine that can induce the release of IL-6 by mouse stromal cells. It has been shown to support the growth of hemopoietic progenitors in vitro; it can also stimulate granulopoiesis in vivo. The TC11-18H10 antibody has been reported to neutralize IL-17A activity. Recent studies have shown that IL-17A is produced by a unique subset of Th17 cells that develop along a pathway distinct from the Th1- and Th2- cell differentiation pathways. The mouse IL-17A cDNA was isolated from a cDNA library generated from TCRαβ+CD4-CD8- thymocytes.



Flow cytometric analysis of IL-17A-producing cells within a stimulated mouse EL4 thymoma cell population. *EL4 cells were stimulated (left and middle panels) or unstimulated (right panel) with PMA (50 ng/ml final concentration; Sigma, Cat. No. P-8139) and Ionomycin (1000 ng/ml final concentration; Sigma, Cat. No. I-0634) in the presence of BD GolgiStop™ Protein Transport Inhibitor (Cat. No. 554724) for 5 hours. The cells were fixed, permeabilized and subsequently stained with Alexa Fluor® 700 Rat Anti-Mouse IL-17A (Cat. No. 560820; middle and right panels) or Alexa Fluor® 700 Rat IgG1 κ Isotype Control (Cat. No. 558001; left panel) using BD Biosciences' protocol for Immunofluorescent Staining of Intracellular Cytokines for Flow Cytometric Analysis. Bivariate flow cytometric dot plots showing correlated expression patterns of IL-17A (Alexa Fluor® 700) versus cellular autofluorescence (FL1) were derived from gated events with the forward and side light-scatter characteristics of viable cells. The quadrant markers for the bivariate dot plots were set based on the autofluorescence control (FL1) and the Alexa Fluor® 700 Rat IgG1 κ Isotype Control staining. Flow cytometry was performed on a BD™ LSR II Flow Cytometer System.*

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Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
558001	Alexa Fluor® 700 Rat IgG1 κ Isotype Control	0.1 mg	R3-34
554724	Protein Transport Inhibitor (Containing Monensin)	0.7 ml	(none)
554722	Fixation and Permeabilization Solution	125 ml	(none)
554723	Perm/Wash Buffer	100 ml	(none)
554655	Fixation Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
6. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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