

## Technical Data Sheet

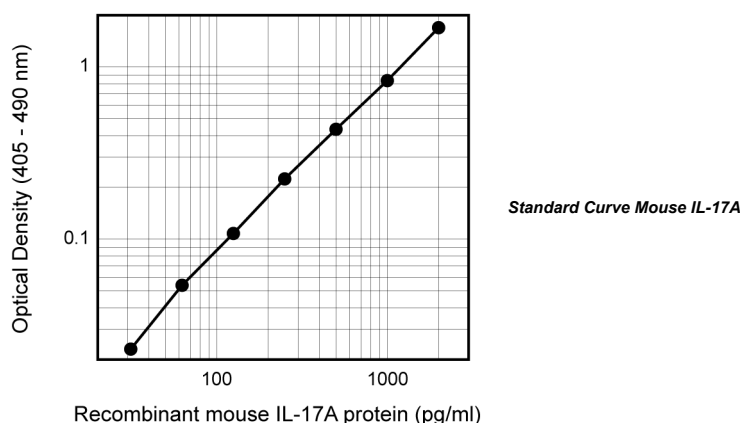
## Biotin Rat Anti-Mouse IL-17A

## Product Information

<b>Material Number:</b>	555067
<b>Alternate Name:</b>	IL-17; IL17; IL-17A; IL17a; CTLA-8; Ctl8; Interleukin-17A; interleukin 17A
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	TC11-8H4
<b>Immunogen:</b>	Recombinant mouse IL-17A
<b>Isotype:</b>	Rat IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The TC11-8H4 monoclonal antibody specifically binds to recombinant and natural mouse IL-17A proteins. IL-17A, also known as Cytotoxic T-lymphocyte-associated antigen 8 (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. 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 TCR $\alpha\beta$ +CD4-CD8- thymocytes.



## 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 with biotin under optimum conditions, and unreacted biotin was removed.

## Application Notes

## Application

ELISA Detection	Routinely Tested
Western blot	Reported

## Recommended Assay Procedure:

**1. ELISA Detection:** The biotinylated TC11-8H4 antibody (Cat. No. 555067) is useful as a detection antibody for a sandwich ELISA for specifically measuring mouse IL-17A protein levels. Biotinylated TC11-8H4 antibody can be paired with the purified TC11-18H10 antibody (Cat. No. 555068) as the capture antibody, with recombinant mouse IL-17A protein as the standard. The biotinylated TC11-8H4 antibody should be titrated for 0.5  $\mu\text{g/ml}$  to 2.0  $\mu\text{g/ml}$  to determine its optimal concentration for ELISA detection. To obtain linear standard curves, doubling dilutions of mouse IL-17A protein ranging from ~2000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit our website, [www.bdbiosciences.com](http://www.bdbiosciences.com), and go to the protocols section or the chapter on ELISA in the Immune Function Handbook.

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**Note:** This ELISA pair shows no cross-reactivity with any of the cytokines or chemokines tested (e.g., mouse IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-12 p70, IL-15, GM-CSF, IFN- $\gamma$ , MCP-1, TCA-3, TNF; human IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, IFN- $\gamma$ , lymphotactin, MCP-1, MCP-2, MIP-1 $\alpha$ , MIP-1 $\beta$ , NT-3, PDGF-AA, sCD23, SCF, TNF, LT- $\alpha$ , VEGF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN- $\gamma$ , TNF).

**2. Western blot:** The TC11-8H4 antibody has been reported to be useful for western blotting. Please note that this application is not routinely tested at BD Biosciences Pharmingen.

### Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
555068	Purified Rat Anti-Mouse IL-17A	0.5 mg	TC11-18H10

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).

### References

Coquet JM, Chakravarti S, Kyriassoudis K, McNab FW, Pitt LA, McKenzie BS, Berzins SP, Smyth MJ, Godfrey DI. Diverse cytokine production by NKT cell subsets and identification of an IL-17-producing CD4-NK1.1- NKT cell population. *Proc Natl Acad Sci U S A*. 2008; 105(32):11287-11292. (Biology)

Dong C. Th17 cells: Current understanding of their generation and regulation. *Eur J Immunol*. 2009; 39(3):640-644. (Biology)

Lampropoulou V, Hoehlig K, Roch T, et al. TLR-activated B cells suppress T cell-mediated autoimmunity. *J Immunol*. 2008; 180(7):4763-4773. (Clone-specific: ELISA)

Schwarzenberger P, La Russa V, Miller A, et al. IL-17 stimulates granulopoiesis in mice: use of an alternate, novel gene therapy-derived method for in vivo evaluation of cytokines. *J Immunol*. 1998; 161(11):6383-6389. (Biology)

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