

# Product datasheet

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# ARG20995 anti-TCR beta antibody [H57-597] (FITC)

Package: 250 μg Store at: 4°C

## **Summary**

Product Description FITC-conjugated Hamster Monoclonal antibody [H57-597] recognizes TCR beta

Tested Reactivity Ms

Tested Application Depletion, FACS, ICC/IF, IHC-P

Specificity Mouse TCR $\beta$ . The clone H57-597 does not react with  $\gamma\delta$  TCR-bearing cells. Plate-bound or soluble

H57-597 activates  $\alpha\beta$  TCR-bearing T cells. In vitro and in vivo, H57-597 can induce immature

thymocytes to undergo apoptosis. In vivo administration of H57-597 has been shown to deplete  $\alpha\beta$  TCR-

bearing cells to near completion and prevent graft rejection.

Host Hamster

**Clonality** Monoclonal

Clone H57-597

Isotype IgG2

Target Name TCR beta

Species Mouse

Immunogen TCR affinity purified from mouse T-cell hybridoma DO-11.10

**TCRB** 

Conjugation FITC

# Application Instructions

**Alternate Names** 

Application table	Application	Dilution
	Depletion	Assay-dependent
	FACS	< 2 μg/10^6 cells
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

# **Properties**

Form Liquid

Buffer PBS and 0.1% Sodium azide.

Preservative 0.1% Sodium azide

Concentration 0.5 mg/ml

Storage instruction

Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

TRB

Gene Full Name

T cell receptor beta chain

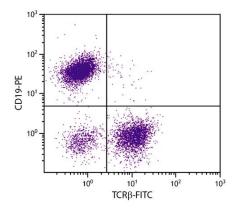
Background

T cell receptors recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer consisting of one alpha and one beta chain or one delta and one gamma chain. In a single cell, the T cell receptor loci are rearranged and expressed in the order delta, gamma, beta, and alpha. If both delta and gamma rearrangements produce functional chains, the cell expresses delta and gamma. If not, the cell proceeds to rearrange the beta and alpha loci. This region represents the germline organization of the T cell receptor beta locus. The beta locus includes V (variable), J (joining), diversity (D), and C (constant) segments. During T cell development, the beta chain is synthesized by a recombination event at the DNA level joining a D segment with a J segment; a V segment is then joined to the D-J gene. The C segment is later joined by splicing at the RNA level. Recombination of many different V segments with several J segments provides a wide range of antigen recognition. Additional diversity is attained by junctional diversity, resulting from the random additional of nucleotides by terminal deoxynucleotidyltransferase. Several V segments and one J segment of the beta locus are known to be incapable of encoding a protein and are considered pseudogenes. The beta locus also includes eight trypsinogen genes, three of which encode functional proteins and five of which are pseudogenes. Chromosomal abnormalities involving the T-cell receptor beta locus have been associated with T-cell lymphomas. [provided by RefSeq, Jul 2008]

Calculated Mw

35 kDa

### **Images**



### ARG20995 anti-TCR beta antibody [H57-597] (FITC) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG20995 anti-TCR beta antibody [H57-597] (FITC) and <u>ARG20852</u> anti-CD19 antibody [6D5] (PE).