

# Product datasheet

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# ARG21174 anti-TCR alpha + TCR beta antibody [TCR-3] (FITC)

Package: 100 μg Store at: 4°C

## **Summary**

Product Description FITC-conjugated Mouse Monoclonal antibody [TCR-3] recognizes TCR alpha + TCR beta

Tested Reactivity Chk

Tested Application Depletion, FACS, IHC-Fr

Specificity The clone TCR-3 precipitates a CD3-associated heterodimer of 88 kDa (two bands of 48 kDa and 40 kDa

upon reduction) on chicken peripheral blood T cells. Deglycosylation of the heterodimer yields two

polypeptides of 34 kDa and 31 kDa.

Host Mouse

Clonality Monoclonal

Clone TCR-3

Isotype IgG1, kappa

Target Name TCR alpha + TCR beta

Species Chicken

Immunogen CD3+ TCR1- TCR2- Ia- chicken blood mononuclear cells

Conjugation FITC

Alternate Names TCR alpha: IMD7; TCRA

TCR beta: TCRB

# **Application Instructions**

Application table	Application	Dilution
	Depletion	Assay-dependent
	FACS	< 1 µg/10^6 cells
	IHC-Fr	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

gently mixed before use.

### Bioinformation

Gene Symbol

TRA; TRB

Gene Full Name

T cell receptor alpha locus; T cell receptor beta locus

Background

TCR beta: 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]