

TCRB1(Texas Red)/CEN7q(FITC) FISH Probe

Catalog # FA0541

Size 200 uL

Specification

Product Description	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. (Technology).
Origin	Human
Source	Genomic DNA
Reactivity	Human
Notice	We strongly recommend the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)
Supplied Product	DAPI Counterstain (1500 ng/mL) 250 uL
Storage Instruction	Store at 4°C in the dark.

Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

Gene Info — TRB@

Entrez GeneID	6957
Gene Name	TRB@
Gene Alias	TCRB, TRB
Gene Description	T cell receptor beta locus

Omim ID [186930](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 addition 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]

Other Designations

T-cell antigen receptor, beta polypeptide, T-cell receptor, beta cluster|T-cell receptor, beta cluster

Disease

- [Arthritis](#)
- [Asthma](#)
- [Autoimmune Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Helicobacter Infections](#)
- [Inflammation](#)
- [Liver Cirrhosis](#)
- [Lupus Erythematosus](#)
- [Malaria](#)
- [Multiple Sclerosis](#)
- [Neoplasms](#)

- [Parasitemia](#)
- [Peptic Ulcer](#)