# LymphoSeqDB

July 23, 2025

prevalenceTRB

Prevalence of T cell receptor beta CDR3 amino acid sequences

#### Description

A database of unique productive T cell receptor beta CDR3 amino acid sequences from the peripheral blood of 55 healthy individuals, age range 0-90 years.

#### Usage

prevalenceTRB

### Format

A dataframe with 11,724,292 rows and 2 columns. The first column corresponds to T cell receptor beta CDR3 amino acid sequences. The second column corresponds to the % frequency that the sequence appeared within the peripheral blood of 55 healthy individuals.

#### Source

Sequencing from 39 individuals, age ranging from 0-90 years, was obtained from Britanova, O. V. et al. The Journal of Immunology 2014; 192: 2689-2698 (http://mitcr.milaboratory.com/ datasets/aging2013/). Sequencing for the the remaining 16 individuals, age range from 17-67 years, was obtained from "Origin and evolution of the T-cell repertoire after posttransplantation cyclophosphamide" (https://clients.adaptivebiotech.com/publishedProjects). publishedTRB

#### Description

A database of unique productive T cell receptor beta CDR3 amino acid sequences with known antigen specificity.

#### Usage

publishedTRB

## Format

A dataframe with 3,706 rows and 6 columns corresponding amino acid sequence, PubMed ID (PMID), HLA type, antigen specificity, epitope, and % prevalence that the sequence appeared within the peripheral blood of 55 healthy individuals.

#### Source

Citation for each sequence is provided as a PubMed ID (PMID) within the database. Steve House and Will DeWitt from Adaptive Biotechnologies helped to curate the list of published sequences.

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