LymphoSeqDB

February 19, 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).

2 publishedTRB

publishedTRB	Published T cell receptor beta CDR3 amino acid sequences with known antigen specificity

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.

Index

```
* datasets
    prevalenceTRB, 1
    publishedTRB, 2

prevalenceTRB, 1
publishedTRB, 2
```