

Resource Summary Report

Generated by [T1D](#) on Jul 31, 2026

Decombinator

RRID:SCR_006732

Type: Tool

Proper Citation

Decombinator (RRID:SCR_006732)

Resource Information

URL: <https://github.com/uclinfectionimmunity/Decombinator>

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Description: Software suite for analysis of T cell receptor repertoire data. Used for fast, efficient analysis of T cell receptor (TcR) repertoire samples, designed to be accessible to those with no previous programming experience.

Synonyms: Decombinator v2.2, Decombinator v4.0.3

Resource Type: data processing software, software toolkit, data analysis software, software resource, software application

Defining Citation: [PMID:23303508](#), [PMID:32853330](#)

Keywords: Python, t-cell receptor sequence, t-cell receptor, sequence, deep sequencing, TCR repertoires, repertoire data, bio.tools

Availability: Free, Available for download, Freely available

Resource Name: Decombinator

Resource ID: SCR_006732

Alternate IDs: biotools:decombinator, OMICS_00001

Alternate URLs: <https://github.com/innate2adaptive/Decombinator>,
<https://bio.tools/decombinator>

Record Creation Time: 20220129T080237+0000

Record Last Update: 20260731T042728+0000

Ratings and Alerts

No rating or validation information has been found for Decombinator.

No alerts have been found for Decombinator.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 28 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

Barroux M, et al. (2025) Evolutionary and immune microenvironment dynamics during neoadjuvant treatment of esophageal adenocarcinoma. *Nature cancer*, 6(5), 820.

Sandhar B, et al. (2025) Heterogeneity of thymic output in the elderly and its association with sex and smoking. *JCI insight*, 10(15).

Yanez DC, et al. (2025) Distinctive T-cell receptor repertoire in paediatric inflammatory multisystem syndrome temporally associated with coronavirus disease 2019/multisystem inflammatory syndrome in children patients: possible thymus involvement. *Clinical and experimental immunology*, 219(1).

Al Bakir M, et al. (2025) Clonal driver neoantigen loss under EGFR TKI and immune selection pressures. *Nature*, 639(8056), 1052.

Lindeboom RGH, et al. (2024) Human SARS-CoV-2 challenge uncovers local and systemic response dynamics. *Nature*, 631(8019), 189.

Vyas V, et al. (2024) Tissue-resident memory T cells in epicardial adipose tissue comprise transcriptionally distinct subsets that are modulated in atrial fibrillation. *Nature cardiovascular research*, 3(9), 1067.

Patin EC, et al. (2024) Sculpting the tumour microenvironment by combining radiotherapy and ATR inhibition for curative-intent adjuvant immunotherapy. *Nature communications*, 15(1), 6923.

Armstrong E, et al. (2024) Combination of oncolytic Maraba virus with immune checkpoint blockade overcomes therapy resistance in an immunologically cold model of advanced melanoma with dysfunctional T-cell receptor signalling. *Journal for immunotherapy of cancer*, 12(7).

Baker AM, et al. (2024) FUME-TCRseq Enables Sensitive and Accurate Sequencing of the T-cell Receptor from Limited Input of Degraded RNA. *Cancer research*, 84(10), 1560.

Rowell J, et al. (2024) Distinct T-cell receptor (TCR) gene segment usage and MHC-restriction between foetal and adult thymus. *eLife*, 13.

Vujanović M, et al. (2023) Signatures of T cell immunity revealed using sequence similarity with TCRDivER algorithm. *Communications biology*, 6(1), 357.

Barroux M, et al. (2023) Evolutionary and immune microenvironment dynamics during neoadjuvant treatment of oesophageal adenocarcinoma. *Research square*.

Ronel T, et al. (2021) The clonal structure and dynamics of the human T cell response to an organic chemical hapten. *eLife*, 10.

Lee L, et al. (2021) Increased Immune-Regulatory Receptor Expression on Effector T Cells as Early Indicators of Relapse Following Autologous Stem Cell Transplantation for Multiple Myeloma. *Frontiers in immunology*, 12, 618610.

Turner CT, et al. (2021) Persistent T Cell Repertoire Perturbation and T Cell Activation in HIV After Long Term Treatment. *Frontiers in immunology*, 12, 634489.

Chiou SH, et al. (2021) Global analysis of shared T cell specificities in human non-small cell lung cancer enables HLA inference and antigen discovery. *Immunity*, 54(3), 586.

Sandgaard KS, et al. (2021) Plasticity of the Immune System in Children Following Treatment Interruption in HIV-1 Infection. *Frontiers in immunology*, 12, 643189.

de Greef PC, et al. (2020) The naive T-cell receptor repertoire has an extremely broad distribution of clone sizes. *eLife*, 9.

Thomas S, et al. (2019) Framework engineering to produce dominant T cell receptors with enhanced antigen-specific function. *Nature communications*, 10(1), 4451.

Fu X, et al. (2018) High-Throughput Sequencing of the Expressed Torafugu (*Takifugu rubripes*) Antibody Sequences Distinguishes IgM and IgT Repertoires and Reveals Evidence of Convergent Evolution. *Frontiers in immunology*, 9, 251.