

Resource Summary Report

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MiTCR

RRID:SCR_004989

Type: Tool

Proper Citation

MiTCR (RRID:SCR_004989)

Resource Information

URL: <http://mitcr.milaboratory.com/>

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Description: An open source software package aimed at extraction of information on repertoire of T-cell clones from Next Generation Sequencing (NGS) data. It is designed with the knowledge of the critical challenges arising in everyday processing of immunological data.

Abbreviations: MiTCR

Synonyms: MiTCR - T-cell receptor repertoire analysis software

Resource Type: software resource

Defining Citation: [PMID:23892897](#)

Keywords: next generation sequencing

Availability: Apache License

Resource Name: MiTCR

Resource ID: SCR_004989

Alternate IDs: OMICS_00003

Record Creation Time: 20220129T080227+0000

Record Last Update: 20260808T185830+0000

Ratings and Alerts

No rating or validation information has been found for MiTCR.

No alerts have been found for MiTCR.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 37 mentions in open access literature.

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

Landry LG, et al. (2026) Quantitative V gene-targeted T cell receptor sequencing as a biomarker in type 1 diabetes. JCI insight, 11(3).

Yang X, et al. (2026) Analysis of the TCR α repertoire characteristics when combining radiotherapy and immunotherapy in cancer. Oncology letters, 31(2), 67.

Yin S, et al. (2026) A macrophage MHC-I axis links intratumoral heterogeneity to terminal CD8 $^{+}$ T cell exhaustion in lung adenocarcinoma. NPJ precision oncology, 10(1).

Yoshikawa S, et al. (2025) Characterization of the Neoantigen Profile in a Tumor Mutation Burden-high Melanoma Patient With Multiple Metastases. Cancer genomics & proteomics, 22(3), 496.

Ali M, et al. (2022) T cells targeted to TdT kill leukemic lymphoblasts while sparing normal lymphocytes. Nature biotechnology, 40(4), 488.

Xydia M, et al. (2021) Common clonal origin of conventional T cells and induced regulatory T cells in breast cancer patients. Nature communications, 12(1), 1119.

Niebuhr M, et al. (2021) Receptor repertoires of murine follicular T helper cells reveal a high clonal overlap in separate lymph nodes in autoimmunity. eLife, 10.

Lin M, et al. (2021) Neoantigen landscape in metastatic nasopharyngeal carcinoma. Theranostics, 11(13), 6427.

Zhang Y, et al. (2020) Tools for fundamental analysis functions of TCR repertoires: a systematic comparison. Briefings in bioinformatics, 21(5), 1706.

Sneddon S, et al. (2020) Identification of a CD8 $^{+}$ T-cell response to a predicted neoantigen in malignant mesothelioma. Oncoimmunology, 9(1), 1684713.

Kovalenko EI, et al. (2020) Surface NKG2C Identifies Differentiated $\alpha\alpha$ -T-Cell Clones Expanded in Peripheral Blood. Frontiers in immunology, 11, 613882.

Hou X, et al. (2019) Shorter TCR α -Chains Are Highly Enriched During Thymic Selection and Antigen-Driven Selection. Frontiers in immunology, 10, 299.

Wang X, et al. (2019) Characterization of Distinct T Cell Receptor Repertoires in Tumor and Distant Non-tumor Tissues from Lung Cancer Patients. *Genomics, proteomics & bioinformatics*, 17(3), 287.

Zheng M, et al. (2019) TCR repertoire and CDR3 motif analyses depict the role of ?? T cells in Ankylosing spondylitis. *EBioMedicine*, 47, 414.

Wang J, et al. (2019) HPV-positive status associated with inflamed immune microenvironment and improved response to anti-PD-1 therapy in head and neck squamous cell carcinoma. *Scientific reports*, 9(1), 13404.

Link-Rachner CS, et al. (2019) T-cell receptor-? repertoire of CD8+ T cells following allogeneic stem cell transplantation using next-generation sequencing. *Haematologica*, 104(3), 622.

Hou X, et al. (2019) No difference in TCR? repertoire of CD4+ naive T cell between patients with primary biliary cholangitis and healthy control subjects. *Molecular immunology*, 116, 167.

Nonomura C, et al. (2019) Identification of a neoantigen epitope in a melanoma patient with good response to anti-PD-1 antibody therapy. *Immunology letters*, 208, 52.

Yang G, et al. (2018) Characteristic analysis of TCR ?-chain CDR3 repertoire for pre- and post-liver transplantation. *Oncotarget*, 9(77), 34506.

Gensterblum E, et al. (2018) CD4+CD28+KIR+CD11ahi T cells correlate with disease activity and are characterized by a pro-inflammatory epigenetic and transcriptional profile in lupus patients. *Journal of autoimmunity*, 86, 19.