

Resource Summary Report

Generated by [ASWG](#) on Aug 5, 2026

OptiType

RRID:SCR_022279

Type: Tool

Proper Citation

OptiType (RRID:SCR_022279)

Resource Information

URL: <https://github.com/FRED-2/OptiType>

Proper Citation: OptiType (RRID:SCR_022279)

Description: Software tool for precision HLA typing from next generation sequencing data.

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

Defining Citation: [PMID:25143287](#)

Keywords: Precision HLA typing, next generation sequencing data, HLA typing, NGS data

Funding: German Research Foundation ;
German Federal Ministry of Education and Research

Availability: Free, Available for download, Freely available

Resource Name: OptiType

Resource ID: SCR_022279

Alternate IDs: OMICS_05461

Alternate URLs: <https://sources.debian.org/src/optitype/>

Record Creation Time: 20220512T050141+0000

Record Last Update: 20260805T044503+0000

Ratings and Alerts

No rating or validation information has been found for OptiType.

No alerts have been found for OptiType.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 44 mentions in open access literature.

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

Apavaloaei A, et al. (2025) Tumor antigens preferentially derive from unmutated genomic sequences in melanoma and non-small cell lung cancer. *Nature cancer*, 6(8), 1419.

Yudina A, et al. (2025) Clinical and analytical validation of a combined RNA and DNA exome assay across a large tumor cohort. *Communications medicine*, 5(1), 236.

Stupichev D, et al. (2025) AI-driven multimodal algorithm predicts immunotherapy and targeted therapy outcomes in clear cell renal cell carcinoma. *Cell reports. Medicine*, 6(8), 102299.

Obispo D, et al. (2024) New Associations with the HIV Predisposing and Protective Alleles of the Human Leukocyte Antigen System in a Peruvian Population. *Viruses*, 16(11).

Skadborg SK, et al. (2024) Nivolumab Reaches Brain Lesions in Patients with Recurrent Glioblastoma and Induces T-cell Activity and Upregulation of Checkpoint Pathways. *Cancer immunology research*, 12(9), 1202.

Das A, et al. (2024) Combined Immunotherapy Improves Outcome for Replication-Repair-Deficient (RRD) High-Grade Glioma Failing Anti-PD-1 Monotherapy: A Report from the International RRD Consortium. *Cancer discovery*, 14(2), 258.

Ricker CA, et al. (2024) Historical perspective and future directions: computational science in immuno-oncology. *Journal for immunotherapy of cancer*, 12(1).

Lai SK, et al. (2024) A novel framework for human leukocyte antigen (HLA) genotyping using probe capture-based targeted next-generation sequencing and computational analysis. *Computational and structural biotechnology journal*, 23, 1562.

Deng Y, et al. (2024) Multicellular ecotypes shape progression of lung adenocarcinoma from ground-glass opacity toward advanced stages. *Cell reports. Medicine*, 5(4), 101489.

Burleigh A, et al. (2024) Genetic testing of Behçet's disease using next-generation sequencing to identify monogenic mimics and HLA-B*51. *Rheumatology (Oxford, England)*, 63(12), 3457.

Bulashevskaya A, et al. (2024) Artificial intelligence and neoantigens: paving the path for precision cancer immunotherapy. *Frontiers in immunology*, 15, 1394003.

Zhang C, et al. (2024) Neoadjuvant sintilimab plus chemotherapy in EGFR-mutant NSCLC: Phase 2 trial interim results (NEOTIDE/CTONG2104). *Cell reports. Medicine*, 5(7), 101615.

Barquera R, et al. (2024) Ancient genomes reveal insights into ritual life at Chichén Itzá. *Nature*, 630(8018), 912.

Sun Y, et al. (2024) Integrated multi-omics profiling to dissect the spatiotemporal evolution of metastatic hepatocellular carcinoma. *Cancer cell*, 42(1), 135.

Nanjala R, et al. (2023) Assessing HLA imputation accuracy in a West African population. *bioRxiv : the preprint server for biology*.

Wang S, et al. (2023) SpecHLA enables full-resolution HLA typing from sequencing data. *Cell reports methods*, 3(9), 100589.

García-Mulero S, et al. (2023) Driver mutations in GNAQ and GNA11 genes as potential targets for precision immunotherapy in uveal melanoma patients. *Oncoimmunology*, 12(1), 2261278.

Song L, et al. (2023) Efficient and accurate KIR and HLA genotyping with massively parallel sequencing data. *Genome research*, 33(6), 923.

Nanjala R, et al. (2023) Assessing HLA imputation accuracy in a West African population. *PloS one*, 18(9), e0291437.

van den Bulk J, et al. (2023) Neoantigen Targetability in Progressive Advanced Melanoma. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 29(20), 4278.