

# Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.sci-crunch.org) on Apr 16, 2025

## CopyKAT

RRID:SCR\_024512

Type: Tool

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### Proper Citation

CopyKAT (RRID:SCR\_024512)

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### Resource Information

**URL:** <https://github.com/navinlabcode/copykat>

**Proper Citation:** CopyKAT (RRID:SCR\_024512)

**Description:** Software R package to estimate genomic copy number profiles at average genomic resolution of 5 Mb from read depth in high throughput single cell RNA sequencing data. Used for inference of genomic copy number and subclonal structure of human tumors from high-throughput single cell RNAseq data.

**Synonyms:** , Copynumber Karyotyping of Aneuploid Tumors

**Resource Type:** software resource, software toolkit

**Defining Citation:** [PMID:33462507](https://pubmed.ncbi.nlm.nih.gov/33462507/)

**Keywords:** Inference of genomic copy number and subclonal structure of human tumors, high throughput single cell RNAseq data,

**Funding:**

**Availability:** Free, Available for download, Freely available

**Resource Name:** CopyKAT

**Resource ID:** SCR\_024512

**Record Creation Time:** 20231002T161337+0000

**Record Last Update:** 20250416T064011+0000

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## Ratings and Alerts

No rating or validation information has been found for CopyKAT.

No alerts have been found for CopyKAT.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 34 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

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.

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.

De Zuani M, et al. (2024) Single-cell and spatial transcriptomics analysis of non-small cell lung cancer. *Nature communications*, 15(1), 4388.

Zhang Q, et al. (2024) Investigating cellular similarities and differences between upper tract urothelial carcinoma and bladder urothelial carcinoma using single-cell sequencing. *Frontiers in immunology*, 15, 1298087.

Liu B, et al. (2024) Distinctive multicellular immunosuppressive hubs confer different intervention strategies for left- and right-sided colon cancers. *Cell reports. Medicine*, 5(6), 101589.

Burdett NL, et al. (2024) Timing of whole genome duplication is associated with tumor-specific MHC-II depletion in serous ovarian cancer. *Nature communications*, 15(1), 6069.

Yang Y, et al. (2024) Reconstitution of the Multiple Myeloma Microenvironment Following Lymphodepletion with BCMA CAR-T Therapy. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 30(18), 4201.

Yang Z, et al. (2024) Single-cell sequencing reveals immune features of treatment response to neoadjuvant immunochemotherapy in esophageal squamous cell carcinoma. *Nature communications*, 15(1), 9097.

Wang X, et al. (2024) Single-cell transcriptomics reveals the role of antigen presentation in liver metastatic breast cancer. *iScience*, 27(2), 108896.

Si Y, et al. (2024) RNA-seq and bulk RNA-seq data analysis of cancer-related fibroblasts (CAF) in LUAD to construct a CAF-based risk signature. *Scientific reports*, 14(1), 23243.

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

Ma J, et al. (2024) Revealing a cancer-associated fibroblast-based risk signature for pancreatic adenocarcinoma through single-cell and bulk RNA-seq analysis. *Aging*, 16(18), 12525.

He X, et al. (2024) Identification of a senescence-related transcriptional signature to uncover molecular subtypes and key genes in hepatocellular carcinoma. *PloS one*, 19(10), e0311696.

Bu L, et al. (2024) CHD6 eviction of promoter nucleosomes maintains housekeeping transcriptional program in prostate cancer. *Molecular therapy. Nucleic acids*, 35(4), 102397.

Liu S, et al. (2024) Single-cell dissection of multifocal bladder cancer reveals malignant and immune cells variation between primary and recurrent tumor lesions. *Communications biology*, 7(1), 1659.

Kang Z, et al. (2024) Identification macrophage signatures in prostate cancer by single-cell sequencing and machine learning. *Cancer immunology, immunotherapy : CII*, 73(3), 41.

Liu H, et al. (2024) GJB2 Promotes HCC Progression by Activating Glycolysis Through Cytoplasmic Translocation and Generating a Suppressive Tumor Microenvironment Based on Single Cell RNA Sequencing. *Advanced science (Weinheim, Baden-Wurtemberg, Germany)*, 11(39), e2402115.

Dong Q, et al. (2023) Mutant RB1 enhances therapeutic efficacy of PARPis in lung adenocarcinoma by triggering the cGAS/STING pathway. *JCI insight*, 8(21).

Dai Z, et al. (2023) Characterizing ligand-receptor interactions and unveiling the pro-tumorigenic role of CCL16-CCR1 axis in the microenvironment of hepatocellular carcinoma. *Frontiers in immunology*, 14, 1299953.

De Falco A, et al. (2023) A variational algorithm to detect the clonal copy number substructure of tumors from scRNA-seq data. *Nature communications*, 14(1), 1074.