

Resource Summary Report

Generated by [NIF](#) on Sep 13, 2026

RT-4

RRID:CVCL_0036

Type: Cell Line

Proper Citation

RRID:CVCL_0036

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0036

Proper Citation: RRID:CVCL_0036

Description: Cell line RT-4 is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Male

Disease: Bladder carcinoma

Defining Citation: [PMID:77569](#), [PMID:327080](#), [PMID:571047](#), [PMID:833871](#), [PMID:864752](#), [PMID:870558](#), [PMID:1114348](#), [PMID:3518877](#), [PMID:3708594](#), [PMID:5503601](#), [PMID:6220172](#), [PMID:6244232](#), [PMID:6582512](#), [PMID:6823318](#), [PMID:7017212](#), [PMID:7459858](#), [PMID:7787250](#), [PMID:8873383](#), [PMID:9850064](#), [PMID:11207054](#), [PMID:11921286](#), [PMID:15846775](#), [PMID:16885334](#), [PMID:16957166](#), [PMID:20164919](#), [PMID:20215515](#), [PMID:22460905](#), [PMID:23401075](#), [PMID:24018021](#), [PMID:24035680](#), [PMID:24367658](#), [PMID:25485619](#), [PMID:25877200](#), [PMID:25960936](#), [PMID:25997541](#), [PMID:26055179](#), [PMID:26589293](#), [PMID:27270441](#), [PMID:27397505](#), [PMID:28855393](#), [PMID:29732388](#), [PMID:30894373](#), [PMID:31068700](#), [PMID:31395879](#), [PMID:31978347](#), [PMID:35839778](#)

Comments: Population: Caucasian., Part of: UBC-40 urothelial bladder cancer cell line index., Part of: TCGA-110-CL cell line panel., Part of: Naval Biosciences Laboratory (NBL) collection (transferred to ATCC in 1982)., Part of: Human Protein Atlas, Cell Atlas panel., Part of: ERK genetic alteration cell panel (ATCC TCP-1033)., Part of: COSMIC cell lines project., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Part of: BLA-40 bladder carcinoma cell line panel.

Category: Cancer cell line

Organism: Homo sapiens (Human)

Name: RT-4

Synonyms: RT4, RT4P

Cross References: BTO:BTO_0002870, CLO:CLO_0008892, EFO:EFO_0006480, CLDB:cl4197, CLDB:cl4198, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-2770, ArrayExpress:E-MTAB-3610, ATCC:CRL-7937, ATCC:HTB-2, BCRC:60111, BCRJ:0214, BioGRID_ORCS_Cell_line:382, BioSample:SAMN03473092, BioSample:SAMN10988330, cancercellines:CVCL_0036, CCRID:3101HUMTCHu226, CCRID:5301HUM-KCB16045YJ, Cell_Model_Passport:SIDM01085, ChEMBL-Cells:ChEMBL3307430, ChEMBL-Targets:ChEMBL614884, CLS:300326, Cosmic:687455, Cosmic:715805, Cosmic:755396, Cosmic:760479, Cosmic:845560, Cosmic:846283, Cosmic:867839, Cosmic:925819, Cosmic:928816, Cosmic:943749, Cosmic:1016881, Cosmic:1046681, Cosmic:1068091, Cosmic:1285125, Cosmic:1285983, Cosmic:1819325, Cosmic:1927301, Cosmic:2037955, Cosmic:2050460, Cosmic:2057455, Cosmic:2444250, Cosmic:2686112, Cosmic:2700996, Cosmic-CLP:687455, DepMap:ACH-000242, DSMZ:ACC-412, DSMZCellDive:ACC-412, ECACC:91091914, EGA:EGAS00001000610, EGA:EGAS00001000978, GDSC:687455, GEO:GSM136232, GEO:GSM763024, GEO:GSM827439, GEO:GSM887553, GEO:GSM888636, GEO:GSM1374859, GEO:GSM1574570, GEO:GSM1670394, GEO:GSM7701369, GEO:GSM7701370, IARC_TP53:21088, KCB:KCB 2016045YJ, KCLB:30002, LiGeA:CCLE_210, LINCS_LDP:LCL-1717, PharmacDB:RT4_1334_2019, PRIDE:PXD030304, Progenetix:CVCL_0036, PubChem_Cell_line:CVCL_0036, SKY/M-FISH/CGH:1462, Wikidata:Q54951351

ID: CVCL_0036

Record Creation Time: 20220427T221508+0000

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Ratings and Alerts

No rating or validation information has been found for RT-4.

Warning: Discontinued: ATCC; CRL-7937

Population: Caucasian., Part of: UBC-40 urothelial bladder cancer cell line index., Part of: TCGA-110-CL cell line panel., Part of: Naval Biosciences Laboratory (NBL) collection (transferred to ATCC in 1982)., Part of: Human Protein Atlas, Cell Atlas panel., Part of: ERK genetic alteration cell panel (ATCC TCP-1033)., Part of: COSMIC cell lines project., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Part of: BLA-40 bladder carcinoma cell line panel.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 38 mentions in open access literature.

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

Le T, et al. (2026) Cell shapes decode molecular phenotypes in image-based spatial proteomics. *Cell systems*, 17(6), 101589.

Luan Y, et al. (2026) Mechanisms of Aristolochic Acid Resistance in Specialist Butterflies and Evolutionary Insights for Potential Protective Pathways. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), e18072.

O'Callaghan LA, et al. (2026) The Antipsychotic Aripiprazole Induces Cytotoxicity in Bladder Cancer Cells While Preserving Urothelial and Bladder Function. *Pharmacology research & perspectives*, 14(3), e70260.

Iskender B, et al. (2026) Reprogramming-driven Proteomic Shifts Mirror Bladder Cancer Progression and Reveal Biomarker Candidates Across Disease Grades. *Cancer genomics & proteomics*, 23(4), 777.

Zhao B, et al. (2026) XPC Deficiency Activate Cisplatin-Mediated Autophagy in Bladder Cancer by Limiting Novel PHRF1-Mediated Ubiquitination of the p53 Protein. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(5), e17563.

Wu J, et al. (2026) O-GlcNAcylated TAP1 Impairs Antigen Presentation and Promotes Immune Evasion in Bladder Cancer. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(37), e19955.

Pece A, et al. (2026) Glycosylated LGALS3BP is highly secreted by bladder cancer cells and represents a novel urinary disease biomarker. *Molecular oncology*, 20(3), 823.

Stuckey JI, et al. (2026) Covalent PPAR γ inverse agonism by FX-909 reveals mechanistic insights into therapeutic targeting of PPAR γ /RXR γ -activated urothelial carcinoma. *Cell chemical biology*, 33(6), 837.

Nelson KL, et al. (2025) VAX014 Activates Tumor-Intrinsic STING and RIG-I to Promote the Development of Antitumor Immunity. *Molecular cancer therapeutics*, 24(4), 587.

Chen C, et al. (2025) TERC Stimulates Fatty Acid Metabolism to Promote Bladder Cancer Progression. *Cancer research*, 85(19), 3689.

Takemoto K, et al. (2025) DGK α Enhances Tumorigenic Activity in Bladder Cancer Patients With Chronic Kidney Disease. *Cancer medicine*, 14(5), e70710.

Yu Y, et al. (2025) A Genome-Wide Synthetic Lethal Screen Identifies Spermidine Synthase as a Target to Enhance Erdafitinib Efficacy in FGFR-Mutant Bladder Cancer. *Cancer research*, 85(12), 2288.

Wang X, et al. (2025) PIN1 Prolyl Isomerase Promotes Initiation and Progression of Bladder Cancer through the SREBP2-Mediated Cholesterol Biosynthesis Pathway. *Cancer discovery*, 15(3), 633.

Reinhold A, et al. (2025) Ionizing radiation and photodynamic therapy lead to multimodal tumor cell death, synergistic cytotoxicity and immune cell invasion in human bladder cancer organoids. *Photodiagnosis and photodynamic therapy*, 51, 104459.

Žeželj L, et al. (2025) Sensing of cardiolipin exposure on plasma membranes of apoptotic cells by EryA-mCherry protein. *The FEBS journal*.

Hatayama T, et al. (2025) Crucial Contribution of BACH1 to Bladder Cancer Progression via Upregulating Epithelial-Mesenchymal Transition Pathway. *Cancer science*.

Graham K, et al. (2024) Discovery of YAP1/TAZ pathway inhibitors through phenotypic screening with potent anti-tumor activity via blockade of Rho-GTPase signaling. *Cell chemical biology*, 31(7), 1247.

Chen H, et al. (2024) circKDM1A suppresses bladder cancer progression by sponging miR-889-3p/CPEB3 and stabilizing p53 mRNA. *iScience*, 27(4), 109624.

Ranti D, et al. (2024) HLA-E and NKG2A Mediate Resistance to M. bovis BCG Immunotherapy in Non-Muscle-Invasive Bladder Cancer. *bioRxiv : the preprint server for biology*.

Hernández-Prat A, et al. (2024) Enhancing immunotherapy through PD-L1 upregulation: the promising combination of anti-PD-L1 plus mTOR inhibitors. *Molecular oncology*.