

Resource Summary Report

Generated by [RRID](#) on Sep 2, 2026

NRK-52E

RRID:CVCL_0468

Type: Cell Line

Proper Citation

RRID:CVCL_0468

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0468

Proper Citation: RRID:CVCL_0468

Description: Cell line NRK-52E is a Spontaneously immortalized cell line with a species of origin *Rattus norvegicus* (Rat)

Defining Citation: [PMID:304450](#), [PMID:7732277](#), [PMID:29460274](#), [PMID:33122286](#)

Category: Spontaneously immortalized cell line

Organism: *Rattus norvegicus* (Rat)

Name: NRK-52E

Synonyms: NRK 52E, NRK52E, NRK clone 52E, Normal Rat Kidney-52E, NRK-E52

Cross References: BTO:BTO_0002408, CLO:CLO_0008198, EFO:EFO_0022762, MCCL:MCC:0000366, CLDB:cl3732, CLDB:cl3733, ATCC:CRL-1571, BCRC:60086, CCRID:1101RAT-PUMC000822, CCRID:3101RATGNR8, ChEMBL-Cells:ChEMBL4483159, ChEMBL-Targets:ChEMBL4483282, CLS:305196, DSMZ:ACC-199, DSMZCellDive:ACC-199, ECACC:87012902, GEO:GSM4009053, GEO:GSM4009054, GEO:GSM4009055, JCRB:IFO50480, Lonza:147, PRIDE:PX021160, PubChem_Cell_line:CVCL_0468, TOKU-E:2774, Wikidata:Q54931030

ID: CVCL_0468

Hierarchy: cvcl_3758

Record Creation Time: 20220427T221347+0000

Record Last Update: 20260829T235443+0000

Ratings and Alerts

No rating or validation information has been found for NRK-52E.

No alerts have been found for NRK-52E.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 491 mentions in open access literature.

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

Chen J, et al. (2026) Subchronic co-exposure to dibutyl phthalate and benzo(a)pyrene exacerbates renal inflammation and fibrosis in rat: Crosstalk between tubular epithelial cells and fibroblasts. *Chemico-biological interactions*, 424, 111887.

Gu L, et al. (2026) SGLT2 Inhibition Attenuates Renal Tubular Senescence by Suppressing CTRP1-Mediated Glucotoxic Stress in Diabetic Kidney Disease. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 40(14), e72142.

Duan F, et al. (2026) Inhibition of GRK2 mitigates cisplatin-induced acute and chronic nephrotoxicity by targeting the NADPH oxidase 4/oxidative stress axis. *British journal of pharmacology*, 183(12), 3149.

Lan T, et al. (2026) Shen-Shuai-II-Recipe inhibits aerobic glycolysis through SIRT1 in 5/6 ablation/infarction renal failure model. *Scientific reports*, 16(1), 5022.

Wu CL, et al. (2025) Depletion of tropomyosin 1.6 alleviates TGF- β 1-induced fibroblast activation by promoting the β -SMA-MMP9 matrix-degrading structure. *iScience*, 28(9), 113317.

Frings S, et al. (2024) Epigenetic alterations in bioaccumulators of cadmium: Lessons from mammalian kidneys and plants. *Environment international*, 191, 109000.

Dennis CD, et al. (2024) Laryngeal Cancer Cells Metabolize 25-Hydroxyvitamin D3 and Respond to 24R,25-dihydroxyvitamin D3 via a Mechanism Dependent on Estrogen Receptor Levels. *Cancers*, 16(9).

Qiao P, et al. (2023) Activation of NRF2 Signaling Pathway Delays the Progression of Hyperuricemic Nephropathy by Reducing Oxidative Stress. *Antioxidants (Basel, Switzerland)*, 12(5).

Liu L, et al. (2023) Exploration of the mechanism of NORAD activation of TGF- β 1/Smad3 through miR-136-5p and promotion of tacrolimus-induced renal fibrosis. *Renal failure*, 45(1), 2147083.

Schulz MC, et al. (2023) Acidosis Activates the Nrf2 Pathway in Renal Proximal Tubule-Derived Cells through a Crosstalk with Renal Fibroblasts. *Antioxidants* (Basel, Switzerland), 12(2).

Song SH, et al. (2023) Bone morphogenetic protein-7 attenuates pancreatic damage under diabetic conditions and prevents progression to diabetic nephropathy via inhibition of ferroptosis. *Frontiers in endocrinology*, 14, 1172199.

Park SY, et al. (2023) Compound-level identification of sasang constitution type-specific personalized herbal medicine using data science approach. *Heliyon*, 9(2), e13692.

Suzuki S, et al. (2023) CBGA ameliorates inflammation and fibrosis in nephropathy. *Scientific reports*, 13(1), 6341.

Qiu Y, et al. (2023) Ketogenic diet alleviates renal fibrosis in mice by enhancing fatty acid oxidation through the free fatty acid receptor 3 pathway. *Frontiers in nutrition*, 10, 1127845.

Taha M, et al. (2023) Palliative Role of Zamzam Water against Cyclosporine-Induced Nephrotoxicity through Modulating Autophagy and Apoptosis Crosstalk. *Toxics*, 11(4).

Long X, et al. (2023) The Protective Role of Nrf2 in Renal Tubular Cells in Oxidised Low-Density Lipoprotein-Induced Fibrosis. *Analytical cellular pathology* (Amsterdam), 2023, 4134928.

Sun J, et al. (2023) Melatonin Attenuates Mitochondrial Damage in Aristolochic Acid-Induced Acute Kidney Injury. *Biomolecules & therapeutics*, 31(1), 97.

Du YW, et al. (2023) Cyanidin-3-glucoside inhibits ferroptosis in renal tubular cells after ischemia/reperfusion injury via the AMPK pathway. *Molecular medicine* (Cambridge, Mass.), 29(1), 42.

Wang L, et al. (2023) Emodin ameliorates renal injury and fibrosis via regulating the miR-490-3p/HMGA2 axis. *Frontiers in pharmacology*, 14, 1042093.

Ram C, et al. (2023) Biochanin A Ameliorates Nephropathy in High-Fat Diet/Streptozotocin-Induced Diabetic Rats: Effects on NF- κ B/NLRP3 Axis, Pyroptosis, and Fibrosis. *Antioxidants* (Basel, Switzerland), 12(5).