

Resource Summary Report

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NR8383

RRID:CVCL_4396

Type: Cell Line

Proper Citation

RRID:CVCL_4396

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_4396

Proper Citation: RRID:CVCL_4396

Description: Cell line NR8383 is a Spontaneously immortalized cell line with a species of origin Rattus norvegicus (Rat)

Sex: Male

Defining Citation: [PMID:2914814](#), [PMID:3497918](#), [PMID:9738661](#), [PMID:28242876](#)

Comments: Anecdotal: Have been flown in space on the ISS in 2014-2015 to study growth and adaptation to microgravity (PubMed=28242876)., Characteristics: Provides a homogenous source of highly responsive alveolar macrophages which can be used in vitro to study macrophage related activities (ATCC=CRL-2192)., Group: Space-flown cell line (cellonaut).

Category: Spontaneously immortalized cell line

Organism: Rattus norvegicus (Rat)

Name: NR8383

Synonyms: NR-8383, NR 8383, NR8383.1, NR8383 clone AgCl1X3A, AgC11x3A, Normal Rat, August 3, 1983

Cross References: BTO:BTO_0002907, CLO:CLO_0008193, ATCC:CRL-2192, BCRC:60423, CCRID:1101RAT-PUMC000663, CCRID:3101RATGNR9, CLS:305200, KCB:KCB 2010189YJ, Lonza:1390, Wikidata:Q54931021

ID: CVCL_4396

Record Creation Time: 20220427T221347+0000

Record Last Update: 20260802T003142+0000

Ratings and Alerts

No rating or validation information has been found for NR8383.

No alerts have been found for NR8383.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 118 mentions in open access literature.

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

Zhang Y, et al. (2025) Hypoxic Mesenchymal Stem Cell Exosome-Derived SLC25A3 Ameliorates Bronchopulmonary Dysplasia by Modulating Macrophage Polarization and Oxidative Stress. *Cell biochemistry and function*, 43(12), e70152.

Breisch M, et al. (2023) Cell-Biological Response and Sub-Toxic Inflammatory Effects of Titanium Dioxide Particles with Defined Polymorphic Phase, Size, and Shape. *Nanomaterials (Basel, Switzerland)*, 13(10).

He X, et al. (2023) Inhibition of PD-1 Alters the SHP1/2-PI3K/Akt Axis to Decrease M1 Polarization of Alveolar Macrophages in Lung Ischemia-Reperfusion Injury. *Inflammation*, 46(2), 639.

Wu S, et al. (2023) Azithromycin attenuates wheezing after pulmonary inflammation through inhibiting histone H3K27me3 hypermethylation mediated by EZH2. *Clinical epigenetics*, 15(1), 12.

Creutzenberg O, et al. (2022) PLATOX: Integrated In Vitro/In Vivo Approach for Screening of Adverse Lung Effects of Graphene-Related 2D Nanomaterials. *Nanomaterials (Basel, Switzerland)*, 12(8).

Leroux MM, et al. (2022) Aerosol-Cell Exposure System Applied to Semi-Adherent Cells for Aerosolization of Lung Surfactant and Nanoparticles Followed by High Quality RNA Extraction. *Nanomaterials (Basel, Switzerland)*, 12(8).

Sun G, et al. (2022) 3,5,3'-Triiodothyronine-Loaded Liposomes Inhibit Hepatocarcinogenesis Via Inflammation-Associated Macrophages. *Frontiers in oncology*, 12, 877982.

Wiemann M, et al. (2022) Surface Treatment With Hydrophobic Coating Reagents (Organosilanes) Strongly Reduces the Bioactivity of Synthetic Amorphous Silica in vitro. *Frontiers in public health*, 10, 902799.

Wang Y, et al. (2022) Antibacterial activity and cytotoxicity of a novel bacteriocin isolated from *Pseudomonas* sp. strain 166. *Microbial biotechnology*, 15(9), 2337.

Shih SP, et al. (2022) The Antileukemic and Anti-Prostatic Effect of Aeroplysinin-1 Is Mediated through ROS-Induced Apoptosis via NOX Activation and Inhibition of HIF-1 α Activity. *Life* (Basel, Switzerland), 12(5).

Lovrić J, et al. (2022) Correlative High-Resolution Imaging of Iron Uptake in Lung Macrophages. *Analytical chemistry*, 94(37), 12798.

Xie SS, et al. (2022) Endothelial cell ferroptosis mediates monocrotaline-induced pulmonary hypertension in rats by modulating NLRP3 inflammasome activation. *Scientific reports*, 12(1), 3056.

Huang D, et al. (2022) Analgesic and Anti-Arthritic Activities of Polysaccharides in *Chaenomeles speciosa*. *Frontiers in pharmacology*, 13, 744915.

Shi H, et al. (2022) MG132 protects against lung injury following brain death in rats. *Experimental and therapeutic medicine*, 24(5), 687.

Vennemann A, et al. (2022) Subcellular detection of PEBCA particles in macrophages: combining darkfield microscopy, confocal Raman microscopy, and ToF-SIMS analysis. *Drug delivery and translational research*, 12(9), 2075.

Liu W, et al. (2022) *Reineckia carnea* Alleviates the Production of Inflammatory Cytokines and MUC5AC in Rats with Chronic Obstructive Pulmonary Disease. *Evidence-based complementary and alternative medicine : eCAM*, 2022, 2135487.

Luo Y, et al. (2022) C/EBP β Promotes LPS-Induced IL-1 β Transcription and Secretion in Alveolar Macrophages via NOD2 Signaling. *Journal of inflammation research*, 15, 5247.

Li P, et al. (2022) lncRNA LOC100911717-targeting GAP43-mediated sympathetic remodeling after myocardial infarction in rats. *Frontiers in cardiovascular medicine*, 9, 1019435.

Yarana C, et al. (2022) Extracellular Vesicles Released after Doxorubicin Treatment in Rats Protect Cardiomyocytes from Oxidative Damage and Induce Pro-Inflammatory Gene Expression in Macrophages. *International journal of molecular sciences*, 23(21).

Ding S, et al. (2021) Macrophage-derived netrin-1 contributes to endometriosis-associated pain. *Annals of translational medicine*, 9(1), 29.