

Resource Summary Report

Generated by [NIF](#) on Aug 30, 2026

PC12

RRID:CVCL_0481

Type: Cell Line

Proper Citation

RRID:CVCL_0481

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0481

Proper Citation: RRID:CVCL_0481

Description: Cell line PC12 is a Cancer cell line with a species of origin Rattus norvegicus (Rat)

Sex: Male

Disease: Rat adrenal gland pheochromocytoma

Defining Citation: [PMID:682602](#), [PMID:1065897](#), [PMID:2187480](#), [PMID:2493070](#), [PMID:2759161](#), [PMID:6500171](#), [PMID:8282765](#), [PMID:9886495](#), [PMID:15541571](#), [PMID:16223334](#), [PMID:18005394](#), [PMID:22538498](#), [PMID:33171774](#), [PMID:34348336](#)

Comments: Characteristics: Responds reversibly to NGF by induction of a neuronal phenotype., Group: Space-flown cell line (cellonaut).

Category: Cancer cell line

Organism: Rattus norvegicus (Rat)

Name: PC12

Synonyms: PC-12, PC 12, PC12.1

Cross References: BTO:BTO_0001009, CLO:CLO_0008392, CLO:CLO_0050821, EFO:EFO_0001225, MCCL:MCC:0000379, CLDB:cl3876, CLDB:cl3877, CLDB:cl3878, CLDB:cl4922, CLDB:cl5245, Abcam:ab279978, AddexBio:C0032001/4927, ATCC:CRL-1721, BCRC:60048, BCRJ:0203, CCRID:1101RAT-PUMC000024, CCRID:3101RATSCSP517, CCRID:3101RATTCTCR3, CCRID:4201RAT-CCTCC000006, CCRID:5301RAT-KCB07036YJ, CCTCC:GDC0006, ChEMBL-Cells:ChEMBL3307976, ChEMBL-Targets:ChEMBL612556, CLS:500311, DSMZ:ACC-159, DSMZCellDive:ACC-159, ECACC:88022401, ICLC:ATL98004, IZSLER:BS TCL 91, JCRB:IFO50278,

JCRB:JCRB0733, KCB:KCB 200735YJ, KCB:KCB 200736YJ, KCB:KCB 93033YJ, KCLB:21721, Lonza:124, MeSH:D016716, NCBI_Iran:C153, PubChem_Cell_line:CVCL_0481, RCB:RCB0009, TOKU-E:2867, TOKU-E:3554, Ubigen:YC-C047, Wikidata:Q7118481

ID: CVCL_0481

Record Creation Time: 20220427T221414+0000

Record Last Update: 20260829T235553+0000

Ratings and Alerts

No rating or validation information has been found for PC12.

No alerts have been found for PC12.

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 3886 mentions in open access literature.

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

Lee S, et al. (2026) Synthetic serum markers enable noninvasive monitoring of gene expression in primate brains. *Neuron*, 114(10), 1751.

Mohr J, et al. (2026) Multimodal Imaging Reveals Rapid Catecholamine Uptake and Release by Neutrophils. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), e24193.

Yang T, et al. (2026) "Membrane-Guided" Repair Strategy: Precision Delivery of GGT1 Degradar for Targeted Repair and Regeneration of Spinal Cord Neurons. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(42), e75554.

Cui C, et al. (2026) Aggregation-Enhanced Piezoelectric Nanotransducers Facilitate Transgene-Free Wireless Neurostimulation under Low-Intensity Focused Ultrasound. *ACS nano*, 20(1), 835.

Zamora F, et al. (2026) Docosahexaenoic Acid Modulates Autophagy and Confers Neuronal Resilience under Hypoxia-Reoxygenation Stress. *Journal of molecular neuroscience : MN*, 76(2).

Shin N, et al. (2026) Neutrophil-Like Mitochondria Enable Blood-Brain Barrier Transmigration and Neuroprotection. *ACS nano*, 20(21), 15116.

Zhang C, et al. (2026) Quantification of Single-Cell Cysteine Using an Electrochemical Nanosensor for Predicting Tumor Disulfidptosis Susceptibility. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(13), e23478.

Li L, et al. (2026) Targeting G3BP1 Condensate Topology Promotes Stress Granule Assembly via m6A-IGF2BP1 for Ischemic Stroke Rescue. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(6), e14703.

Wang W, et al. (2026) Nanotherapeutic Macrophage-Neuro Reprogramming Through Immunometabolic Crosstalk Mitigates Sepsis-Induced Lung Injury and Neurologic Damage. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(24), e20665.

Shi X, et al. (2026) 3D-Printed, Cellulose-Derived Scaffold Promotes Neuroregeneration and Functional Recovery after Spinal Cord Injury. *ACS biomaterials science & engineering*, 12(3), 1814.

Li ZT, et al. (2026) Natural Product Rengyolone Attenuates LPS-Induced Microglia Inflammation via Suppression of the TLR4/NF- κ B Pathway. *Chemistry & biodiversity*, 23(5), e71314.

Ying X, et al. (2026) Exercise-derived exosomal miR-151-3p: An innovative anti-inflammatory and antioxidant therapeutic for spinal cord injury. *Bioactive materials*, 65, 535.

He ZNT, et al. (2026) H₂S induces apoptosis of tumors with high IDO1 expression via NR4A1-BCL-2 and SOCS3 pathways. *Cellular & molecular biology letters*, 31(1).

Zhou D, et al. (2026) Stepwise Regulation of Cellular Oxidative Stress via Conductive-Piezoelectric Integrated Microstructured Conduits for Enhanced Nerve Regeneration. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(13), e16124.

Cidem A, et al. (2026) BLF stimulates neuronal differentiation via activation of p35/CDK5 signaling and AMPK-mediated mitochondrial regulation. *Neurochemistry international*, 192, 106106.

Zhai Z, et al. (2026) Rationalizing nose-to-brain drug delivery: Machine learning-guided optimization and mechanistic elucidation of olfactory deposition for nasal sprays. *Journal of controlled release : official journal of the Controlled Release Society*, 392, 114667.

Nigri J, et al. (2026) Myofibroblasts Induce Neuroplasticity to Promote Pancreatic Inflammation and Cancer Progression. *Cancer discovery*, 16(5), 1014.

Pavan B, et al. (2026) A new microphysiological platform to study the permeation of neuroactive agents across intestinal and brain barriers. *Biofabrication*, 18(2).

Wu C, et al. (2026) Engineered exosomes mediated siNox4 delivery loaded polyzwitterionic hydrogel with electrophysiologic conductivity for synergistic treatment of spinal cord injury via suppressing neuronal ferroptosis. *Biomaterials*, 331, 124096.

Han KJ, et al. (2026) Molecular Mechanistic Studies on Caffeoylequinic Acid Derivatives From *Vaccinium dunalianum* Wight as Dual-Target Inhibitors of AChE and BChE With In Vitro Inhibitory Evaluation and Molecular Docking. *Chemistry & biodiversity*, 23(5), e03013.