Resource Summary Report

Generated by NIF on Aug 28, 2026

SMMC-7721

RRID:CVCL_0534
Type: Cell Line

Proper Citation

Ubigene Cat# YC-C056, RRID:CVCL_0534

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0534

Proper Citation: Ubigene Cat# YC-C056, RRID:CVCL_0534

Description: Cell line SMMC-7721 is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Female

Disease: Human papillomavirus-related endocervical adenocarcinoma

Defining Citation: PMID:12717835, PMID:17552011, PMID:23505090, PMID:26116706, PMID:28807831

Comments: Miscellaneous: Formerly the CCRID database had 3 entries describing this cell line (3111C0001CCC000087, 3131C0001000700052, 3142C0001000000063). They were one of the sources for the STR profile of this entry., Population: African American., Problematic cell line: Contaminated. Shown to be a HeLa derivative (PubMed=26116706; PubMed=28807831). Originally thought to originate from a hepatocellular carcinoma..

Category: Cancer cell line

Organism: Homo sapiens (Human)

Name: SMMC-7721

Synonyms: SMMC 7721, SMMC7721, H7721, H-7721

Cross References: BTO:BTO_0003227, MCCL:MCC:0000433, ChEMBL-Cells:CHEMBL3308059, ChEMBL-Targets:CHEMBL613831, Cosmic:852773, Cosmic:1060081, Cosmic:1499248, Cosmic:2773184, GEO:GSM501779, GEO:GSM936777, GEO:GSM1374884, PubChem_Cell_line:CVCL_0534, Ubigene:YC-C056, Wikidata:Q54954976

ID: CVCL_0534

Vendor: Ubigene

Catalog Number: YC-C056

Hierarchy: cvcl_0030

Record Creation Time: 20250130T072810+0000

Record Last Update: 20260816T001447+0000

Ratings and Alerts

No rating or validation information has been found for SMMC-7721.

Warning: Problematic cell line: Contaminated. Shown to be a HeLa derivative (PubMed=26116706; PubMed=28807831). Originally thought to originate from a hepatocellular carcinoma.

Registration: International Cell Line Authentication Committee, Register of Misidentified Cell Lines; ICLAC-00554.
Miscellaneous: Formerly the CCRID database had 3 entries describing this cell line (3111C0001CCC000087, 3131C0001000700052, 3142C0001000000063). They were one of the sources for the STR profile of this entry., Population: African American., Problematic cell line: Contaminated. Shown to be a HeLa derivative (PubMed=26116706; PubMed=28807831). Originally thought to originate from a hepatocellular carcinoma..

Data and Source Information

Source: Cellosaurus

Usage and Citation Metrics

We found 1499 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Ning XY, et al. (2026) Four New Triterpenoids From Rubus pirifolius Smith. Chemistry & biodiversity, 23(2), e03037.

Sun JW, et al. (2026) Synergistic Induction of Apoptosis by Apocytochrome C and Sodium Aescinate Is Mediated by Excessive Autophagy via the AKT-mTOR-TFEB Signaling Axis. Cell biochemistry and function, 44(4), e70214.

Liu Y, et al. (2025) Hepatitis B virus core/capsid protein induces hepatocellular carcinoma progression via long non-coding RNA KCNQ1OT1/miR-335-5p/CDC7 axis. Translational cancer research, 14(6), 3319.

Chen Z, et al. (2024) SIGLEC15, negatively correlated with PD-L1 in HCC, could induce CD8+ T cell apoptosis to promote immune evasion. Oncoimmunology, 13(1), 2376264.

Mei Y, et al. (2024) IL-37 dampens immunosuppressive functions of MDSCs via metabolic reprogramming in the tumor microenvironment. Cell reports, 43(3), 113835.

Zhang C, et al. (2024) Re-evaluation of the relationship between PrPc expression and patient prognosis in primary esophageal squamous cell carcinoma and primary hepatocellular carcinoma. Scientific reports, 14(1), 31122.

Yao Z, et al. (2023) The Role of miR-1183: A Potential Suppressor in Hepatocellular Carcinoma via Regulating Splicing Factor SRSF1. Journal of hepatocellular carcinoma, 10, 1169.

Xu S, et al. (2023) Sustained release of therapeutic gene by injectable hydrogel for hepatocellular carcinoma. International journal of pharmaceutics: X, 6, 100195.

Zhang G, et al. (2023) Mitochondrial UQCC3 controls embryonic and tumor angiogenesis by regulating VEGF expression. iScience, 26(8), 107370.

Weiskirchen R, et al. (2023) Research reporting guidelines for cell lines: more than just a recommendation. Annals of translational medicine, 11(12), 421.

Li G, et al. (2023) SAA1 identified as a potential prediction biomarker for metastasis of hepatocellular carcinoma via multi-omics approaches. Frontiers in oncology, 13, 1138995.

Sun L, et al. (2023) Molecular subtype identification and signature construction based on Golgi apparatus-related genes for better prediction prognosis and immunotherapy response in hepatocellular carcinoma. Frontiers in immunology, 14, 1113455.

Xu J, et al. (2023) Hyaluronidase-trigger nanocarriers for targeted delivery of anti-liver cancer compound. RSC advances, 13(16), 11160.

Huang Y, et al. (2023) Novel Gene Signatures Promote Epithelial-Mesenchymal Transition (EMT) in Glucose Deprivation-Based Microenvironment to Predict Recurrence-Free Survival in Hepatocellular Carcinoma. Journal of oncology, 2023, 6114976.

Zhuo H, et al. (2023) RP11-40C6.2 Inactivates Hippo Signaling by Attenuating YAP1 Ubiquitylation in Hepatitis B Virus-associated Hepatocellular Carcinoma. Journal of clinical and translational hepatology, 11(2), 323.

Wang X, et al. (2023) PD-1 blocking strategy for enhancing the anti-tumor effect of CAR T cells targeted CD105. Heliyon, 9(1), e12688.

Long J, et al. (2023) Three New Benzophenone Derivatives from Selaginella tamariscina. Molecules (Basel, Switzerland), 28(12).

Yan XX, et al. (2023) Cytotoxic and pro-apoptotic effects of botanical drugs derived from the indigenous cultivated medicinal plant Paris polyphylla var. yunnanensis. Frontiers in pharmacology, 14, 1100825.

Yang Y, et al. (2023) Proteomics and Metabolomics Analysis Reveals the Toxicity of ZnO Quantum Dots on Human SMMC-7721 Cells. International journal of nanomedicine, 18,

277.

Zhao ZZ, et al. (2023) Pyrrole alkaloids from the fruiting bodies of edible mushroom Lentinula edodes. RSC advances, 13(27), 18223.