

Resource Summary Report

Generated by [RRID](#) on Jul 30, 2026

SMMC-7721

RRID:CVCL_0534

Type: Cell Line

Proper Citation

RRID:CVCL_0534

Cell Line Information

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

Proper Citation: 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, Ubigen:YC-C056, Wikidata:Q54954976

ID: CVCL_0534

Hierarchy: cvcl_0030

Record Creation Time: 20220427T221550+0000

Record Last Update: 20260726T000159+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.

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Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 1497 mentions in open access literature.

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

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.

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.

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.

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

- 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 UQC3 controls embryonic and tumor angiogenesis by regulating VEGF expression. *iScience*, 26(8), 107370.
- 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.
- 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.
- 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.
- Xu J, et al. (2023) Hyaluronidase-trigger nanocarriers for targeted delivery of anti-liver cancer compound. *RSC advances*, 13(16), 11160.
- 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.
- 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.
- 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.
- Long J, et al. (2023) Three New Benzophenone Derivatives from *Selaginella tamariscina*. *Molecules* (Basel, Switzerland), 28(12).
- Liu Q, et al. (2023) Elevated NDC1 expression predicts poor prognosis and correlates with immunity in hepatocellular carcinoma. *Journal of gastrointestinal oncology*, 14(1), 245.
- Wang JX, et al. (2023) Collectin-11 promotes cancer cell proliferation and tumor growth. *JCI insight*, 8(5).
- 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.
- Han X, et al. (2023) Dicer Suppresses Hepatocellular Carcinoma via Interleukin-8 Pathway. *Clinical Medicine Insights. Oncology*, 17, 11795549231161212.