

Resource Summary Report

Generated by [NIF](#) on Sep 10, 2026

NCI-H1703

RRID:CVCL_1490

Type: Cell Line

Proper Citation

RRID:CVCL_1490

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_1490

Proper Citation: RRID:CVCL_1490

Description: Cell line NCI-H1703 is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Male

Disease: Lung squamous cell carcinoma

Defining Citation: [PMID:1311061](#), [PMID:8806092](#), [PMID:11030152](#), [PMID:18083107](#), [PMID:19472407](#), [PMID:20164919](#), [PMID:20215515](#), [PMID:20557307](#), [PMID:22460905](#), [PMID:22961666](#), [PMID:24805778](#), [PMID:25485619](#), [PMID:25877200](#), [PMID:26589293](#), [PMID:27397505](#), [PMID:28196595](#), [PMID:29681454](#), [PMID:30710758](#), [PMID:30894373](#), [PMID:31068700](#), [PMID:31803961](#), [PMID:31978347](#), [PMID:35839778](#)

Comments: Caution: Indicated to have a TP53 p.Glu285Lys (c.853G>A) mutation according to PubMed=1311061., Donor information: Established from a 50 packs per year smoker (ATCC=CRL-5889)., Population: Caucasian., Part of: MD Anderson Cell Lines Project., Part of: COSMIC cell lines project., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE).

Category: Cancer cell line

Organism: Homo sapiens (Human)

Name: NCI-H1703

Synonyms: H1703, H-1703, NCIH1703

Cross References: BTO:BTO_0003009, CLO:CLO_0008014, EFO:EFO_0002264, AddexBio:C0016008/4676, ArrayExpress:E-MTAB-38, ArrayExpress:E-MTAB-783, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-2770, ArrayExpress:E-MTAB-3610,

ATCC:CRL-5889, BioGRID_ORCS_Cell_line:538, BioSample:SAMN03472937, BioSample:SAMN10988304, cancercellines:CVCL_1490, CCRID:1101HUM-PUMC000353, CCRID:3101HUMSCSP593, Cell_Model_Passport:SIDM00740, ChEMBL-Cells:ChEMBL3308503, ChEMBL-Targets:ChEMBL1075522, CLS:305090, Cosmic:687803, Cosmic:903600, Cosmic:908474, Cosmic:980982, Cosmic:1017827, Cosmic:1028952, Cosmic:1032454, Cosmic:1202065, Cosmic:1219064, Cosmic:1239887, Cosmic:1870265, Cosmic:1995536, Cosmic:2009535, Cosmic:2042871, Cosmic:2125180, Cosmic:2630421, Cosmic:2664124, Cosmic-CLP:908474, DepMap:ACH-000747, EGA:EGAS00001000610, EGA:EGAS00001000978, GDSC:908474, GEO:GSM206477, GEO:GSM274733, GEO:GSM274734, GEO:GSM434786, GEO:GSM784217, GEO:GSM794329, GEO:GSM827485, GEO:GSM844628, GEO:GSM887378, GEO:GSM888456, GEO:GSM1374706, GEO:GSM1374707, GEO:GSM1670187, IARC_TP53:501, IARC_TP53:21404, IGRhCellID:NCIH1703, KCLB:91703, LiGeA:CCLE_025, LINCS_HMS:50034, LINCS_LDP:LCL-1582, PharmacDB:NCIH1703_1034_2019, PRIDE:PXD011315, PRIDE:PXD030304, Progenetix:CVCL_1490, PubChem_Cell_line:CVCL_1490, Wikidata:Q54907849

ID: CVCL_1490

Record Creation Time: 20220427T220838+0000

Record Last Update: 20260905T181242+0000

Ratings and Alerts

No rating or validation information has been found for NCI-H1703.

No alerts have been found for NCI-H1703.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 134 mentions in open access literature.

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

Mi W, et al. (2026) LKB1 inactivation elicits an NNMT-mediated methyl sink and confers dependence on PRMT5 in lung cancer. Cell reports, 45(6), 117487.

Zhu L, et al. (2026) Mitochondrial glutamine import sustains electron transport chain integrity independently of glutaminolysis in cancer. Molecular cell, 86(1), 150.

Brady MR, et al. (2026) Macropinocytosis and Vascularization Determine Response to mTOR Inhibitors in Lung Squamous Cell Carcinoma. Cancer research, 86(5), 1166.

Zhao W, et al. (2026) C1RL-AS1/microRNA-424-5p/adrenoceptor ?2 axis: A novel regulatory mechanism in lung adenocarcinoma associated with immune infiltration and

prognosis. PloS one, 21(3), e0343805.

Liu Y, et al. (2026) Mitofusin-2 suppresses tumor immune escape through EGFR/STAT3-mediated PD-L1 transcription. Cell death & disease, 17(1).

Lu S, et al. (2025) Targeting Monounsaturated Fatty Acid Metabolism for Radiosensitization of KRAS Mutant 3D Lung Cancer Models. Molecular cancer therapeutics, 24(6), 920.

Duan L, et al. (2025) Coinhibition of Aurora Kinase B and SUV4-20H Induces Synthetic Lethality in Wild-type p53-Deficient Cancer Cells. Molecular cancer therapeutics, 24(7), 1020.

Su H, et al. (2025) Epsin3 promotes non-small cell lung cancer progression via modulating EGFR stability. Cell & bioscience, 15(1), 14.

McCabe M, et al. (2025) Small molecule disruption of RAR α /NCoR1 interaction inhibits chaperone-mediated autophagy in cancer. EMBO molecular medicine, 17(7), 1716.

Park J, et al. (2025) MYC plus class IIa HDAC inhibition drives mitochondrial dysfunction in non-small cell lung cancer. Cell reports, 44(6), 115722.

Venetz-Arenas N, et al. (2025) Development of DARPins T cell engagers for specific targeting of tumor-associated HLA/peptide complexes. iScience, 28(12), 113926.

Ma H, et al. (2025) Genetic susceptibility to lung squamous cell carcinoma: new insights on 9q33.2 variants and tobacco smoking. Carcinogenesis, 46(2).

Jiang Y, et al. (2025) USP8 deubiquitylation-boosted NSUN4 potentiates lung squamous cell carcinoma progression by m5C methylation of DHCR24. Cell reports, 44(8), 116158.

Morel M, et al. (2024) FBXL16 promotes cell growth and drug resistance in lung adenocarcinomas with KRAS mutation by stabilizing IRS1 and upregulating IRS1/AKT signaling. Molecular oncology, 18(3), 762.

Zuo X, et al. (2024) TNFRSF19 within the 13q12.12 Risk Locus Functions as a Lung Cancer Suppressor by Binding Wnt3a to Inhibit Wnt/ β -Catenin Signaling. Molecular cancer research : MCR, 22(3), 227.

Horie M, et al. (2024) Exosomes secreted by ST3GAL5^{high} cancer cells promote peritoneal dissemination by establishing a premetastatic microenvironment. Molecular oncology, 18(1), 21.

Torres-Martínez S, et al. (2024) Soluble galectin-3 as a microenvironment-relevant immunoregulator with prognostic and predictive value in lung adenocarcinoma. Molecular oncology, 18(1), 190.

Suvilesh KN, et al. (2024) Targeting AKR1B10 by Drug Repurposing with Epalrestat Overcomes Chemoresistance in Non-Small Cell Lung Cancer Patient-Derived Tumor Organoids. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(17), 3855.

Graham K, et al. (2024) Discovery of YAP1/TAZ pathway inhibitors through phenotypic screening with potent anti-tumor activity via blockade of Rho-GTPase signaling. *Cell chemical biology*, 31(7), 1247.

Jaeger-Ruckstuhl CA, et al. (2024) Signaling via a CD27-TRAF2-SHP-1 axis during naive T cell activation promotes memory-associated gene regulatory networks. *Immunity*, 57(2), 287.