

Resource Summary Report

Generated by [RRID](#) on Sep 9, 2026

SUM149PT

RRID:CVCL_3422

Type: Cell Line

Proper Citation

RRID:CVCL_3422

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_3422

Proper Citation: RRID:CVCL_3422

Description: Cell line SUM149PT is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Female

Disease: Breast inflammatory carcinoma

Defining Citation: [PMID:10424408](#), [PMID:10604729](#), [PMID:10700188](#), [PMID:10969801](#), [PMID:12353263](#), [PMID:12800145](#), [PMID:15677628](#), [PMID:15857504](#), [PMID:16397213](#), [PMID:16541312](#), [PMID:17157791](#), [PMID:19582160](#), [PMID:19593635](#), [PMID:22032724](#), [PMID:23151021](#), [PMID:23401782](#), [PMID:23601657](#), [PMID:23784380](#), [PMID:24162158](#), [PMID:24176112](#), [PMID:25485619](#), [PMID:25877200](#), [PMID:26495931](#), [PMID:26589293](#), [PMID:26735014](#), [PMID:28287265](#), [PMID:32416067](#), [PMID:32715085](#), [PMID:35042871](#)

Comments: Characteristics: Derived from a mouse xenograft of a transplanted primary human invasive infiltrating ductal carcinoma metastatic nodule., Part of: KuDOS 95 cell line panel., Part of: JWGray breast cancer cell line panel., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Group: Triple negative breast cancer (TNBC) cell line.

Category: Cancer cell line

Organism: Homo sapiens (Human)

Name: SUM149PT

Synonyms: SUM-149PT, SUM 149PT, SUM149-PT, SUM149, SUM-149, SUM 149, 149 PT, 149PT, BrCL12

Cross References: BTO:BTO_0005475, CLO:CLO_0009917, EFO:EFO_0001240, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-11134, ArrayExpress:E-TABM-157, BioGRID_ORCS_Cell_line:1311, BioSample:SAMN03472959, cancercellines:CVCL_3422, Cell_Model_Passport:SIDM01441, ChEMBL-Cells:ChEMBL4295448, ChEMBL-Targets:ChEMBL4296497, CLS:300609, Cosmic:1044208, Cosmic:1046959, Cosmic:1136379, Cosmic:1176631, Cosmic:1287929, Cosmic:1289411, Cosmic:1460239, Cosmic:1523966, Cosmic:1603224, Cosmic:2036674, DepMap:ACH-001390, EGA:EGAS00001000610, EGA:EGAS00001002554, GEO:GSM115105, GEO:GSM217600, GEO:GSM350549, GEO:GSM421889, GEO:GSM481335, GEO:GSM501233, GEO:GSM501234, GEO:GSM501235, GEO:GSM501237, GEO:GSM501238, GEO:GSM844705, GEO:GSM847433, GEO:GSM847500, GEO:GSM1008916, GEO:GSM1053736, GEO:GSM1172897, GEO:GSM1172992, GEO:GSM1214568, GEO:GSM1215280, GEO:GSM1238140, GEO:GSM1374911, GEO:GSM1401669, GEO:GSM3145734, IARC_TP53:24356, LINCS_HMS:51082, LINCS_LDP:LCL-2067, PharmacDB:SUM149PT_1509_2019, PRIDE:PXD005295, Progenetix:CVCL_3422, PubChem_Cell_line:CVCL_3422, SLKBase:249, Wikidata:Q54970832

ID: CVCL_3422

Record Creation Time: 20220427T221612+0000

Record Last Update: 20260905T182517+0000

Ratings and Alerts

No rating or validation information has been found for SUM149PT.

No alerts have been found for SUM149PT.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 309 mentions in open access literature.

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

Tanka AT, et al. (2026) Integrative CRISPR Screening and RNA Analyses Discover an Essential Role for PUF60 Interactions with 3' Splice Sites in Cancer Progression. Cancer research, 86(7), 1586.

Esapa B, et al. (2026) An antibody-drug conjugate designed through clone and isotype selection restricts the growth of CSPG4-expressing triple-negative breast cancer. NPJ precision oncology, 10(1).

Ellis MO, et al. (2026) Loss of IGF-1R impairs DNA-PKcs recruitment to chromatin leading to defective end-joining. Molecular oncology.

Balamurugan K, et al. (2026) 3D "Emboli" Culture Models Epithelial Breast Cancer Cell Oxidative Mitochondrial Metabolism with Relevance for Lung Metastasis. *Cancer research communications*, 6(3), 600.

Rosen EY, et al. (2026) Camonsertib, an ATRi, in Combination with Low-Dose Gemcitabine in Solid Tumors with DNA Damage Response Aberrations: Preclinical and Phase Ib Results. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 32(8), 1411.

Watlington WK, et al. (2026) Inhibition of cyclin-dependent kinases 12/13 using CT7439 as a treatment for colorectal cancer with CDK12 upregulation. *Molecular oncology*.

Mughees M, et al. (2025) Inhibition of MCL-1 and MEK Overcomes MEK Inhibitor Resistance in Triple-Negative and Inflammatory Breast Cancers. *Molecular cancer therapeutics*, 24(9), 1453.

Qi Z, et al. (2025) PCBP2 Mediates Olaparib Resistance in Breast Cancer by Inhibiting m6A Methylation to Stabilize PARP1 mRNA. *Cancer research*, 85(20), 3949.

Devlin KL, et al. (2025) Growth factors maintain intratumoral heterogeneity and drive therapeutic resistance in triple-negative breast cancer. *Cell reports*, 45(1), 116826.

Giuntini F, et al. (2025) MYC inhibition by Omomyc causes DNA damage and overcomes PARPi resistance in breast cancer. *Cell reports*, 44(12), 116604.

Dobric A, et al. (2025) E-Cadherin Is a Structuring Component of Invadopodia in Pancreatic Cancer. *Journal of cellular and molecular medicine*, 29(9), e70608.

Suresh S, et al. (2025) PARP inhibitor and PRMT5 inhibitor synergy is independent of BRCA1/2 and MTAP status in breast cancer cells. *Scientific reports*, 15(1), 36766.

Dexheimer TS, et al. (2025) High-throughput combination screening of Pidnarulex and other G-quadruplex ligands in multi-cell type tumor spheroids. *SLAS discovery : advancing life sciences R & D*, 37, 100284.

Melino M, et al. (2025) Depleting the action of EZH2 through PI3K-mTOR inhibition to overcome metastasis and immunotherapy resistance in triple-negative breast cancer. *Molecular cancer therapeutics*.

Komar ZM, et al. (2025) Curcumin Induces Homologous Recombination Deficiency by BRCA2 Degradation in Breast Cancer and Normal Cells. *Cancers*, 17(13).

Rybinska I, et al. (2024) SAA1-dependent reprogramming of adipocytes by tumor cells is associated with triple negative breast cancer aggressiveness. *International journal of cancer*.

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.

Cheung A, et al. (2024) Anti-EGFR Antibody-Drug Conjugate Carrying an Inhibitor Targeting CDK Restricts Triple-Negative Breast Cancer Growth. *Clinical cancer research :*

an official journal of the American Association for Cancer Research, 30(15), 3298.

Gao S, et al. (2024) Discovery of Pyrazolo[1,5,4-de]quinoxalin-2(3H)-one Derivatives as Highly Potent and Selective PARP1 Inhibitors. *Journal of medicinal chemistry*, 67(23), 21380.

Treekitkarnmongkol W, et al. (2024) Epigenetic activation of SOX11 is associated with recurrence and progression of ductal carcinoma in situ to invasive breast cancer. *British journal of cancer*, 131(1), 171.