

Resource Summary Report

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MKN45

RRID:CVCL_0434

Type: Cell Line

Proper Citation

RRID:CVCL_0434

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0434

Proper Citation: RRID:CVCL_0434

Description: Cell line MKN45 is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Female

Disease: Gastric adenocarcinoma

Defining Citation: [PMID:758928](#), [PMID:1370612](#), [PMID:1486568](#), [PMID:1778766](#), [PMID:1846553](#), [PMID:1933850](#), [PMID:2061947](#), [PMID:2105279](#), [PMID:3962675](#), [PMID:3986962](#), [PMID:6862145](#), [PMID:9023415](#), [PMID:9247707](#), [PMID:9290701](#), [PMID:9665481](#), [PMID:11107048](#), [PMID:11314020](#), [PMID:11668190](#), [PMID:15723654](#), [PMID:15767549](#), [PMID:15900046](#), [PMID:15901131](#), [PMID:18804159](#), [PMID:20164919](#), [PMID:20215515](#), [PMID:22336246](#), [PMID:22460905](#), [PMID:22531121](#), [PMID:23671654](#), [PMID:24587255](#), [PMID:24807215](#), [PMID:25343454](#), [PMID:25485619](#), [PMID:25877200](#), [PMID:25960936](#), [PMID:26589293](#), [PMID:27397505](#), [PMID:28196595](#), [PMID:29435981](#), [PMID:30894373](#), [PMID:31068700](#), [PMID:31978347](#), [PMID:35839778](#)

Comments: Caution: Was indicated not to have a TP53 mutation in PubMed=1370612 and PubMed=15900046., Characteristics: MET-amplified, contains 12-13 copies of the gene (PubMed=29435981)., Population: Japanese., Part of: MD Anderson Cell Lines Project., Part of: JFCR45 cancer cell line panel., Part of: JFCR39 cancer cell line panel., 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: MKN45

Synonyms: MKN-45, MKN 45

Cross References: BTO:BTO_0001225, CLO:CLO_0007733, CLO:CLO_0050797, EFO:EFO_0002832, MCCL:MCC:0000329, ArrayExpress:E-MTAB-783, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-2770, ArrayExpress:E-MTAB-3610, BioGRID_ORCS_Cell_line:404, BioSample:SAMN03473237, BioSample:SAMN03473585, BioSample:SAMN10988555, cancercellines:CVCL_0434, CCRID:1101HUM-PUMC000229, CCTCC:GDC0220, Cell_Model_Passport:SIDM00247, CGH-DB:120-1, CGH-DB:9022-4, ChEMBL-Cells:ChEMBL3307603, ChEMBL-Targets:ChEMBL614354, CLS:300489, Cosmic:685596, Cosmic:801339, Cosmic:848147, Cosmic:848373, Cosmic:873711, Cosmic:877042, Cosmic:887256, Cosmic:888827, Cosmic:897535, Cosmic:918497, Cosmic:922696, Cosmic:925340, Cosmic:926114, Cosmic:968349, Cosmic:983727, Cosmic:1001651, Cosmic:1001655, Cosmic:1007602, Cosmic:1090461, Cosmic:1093299, Cosmic:1187283, Cosmic:1223589, Cosmic:1329185, Cosmic:1436026, Cosmic:1460707, Cosmic:1518241, Cosmic:1518255, Cosmic:1582430, Cosmic:1627265, Cosmic:1995510, Cosmic:2036663, Cosmic:2807633, Cosmic:2823225, Cosmic-CLP:925340, DepMap:ACH-000356, DSMZ:ACC-409, DSMZCellDive:ACC-409, EGA:EGAS00001000610, EGA:EGAS00001000978, FANTOM5_SSTAR:10612-108F9, GDSC:925340, GEO:GSM552364, GEO:GSM562395, GEO:GSM618013, GEO:GSM618014, GEO:GSM618015, GEO:GSM618016, GEO:GSM827532, GEO:GSM828836, GEO:GSM844607, GEO:GSM887324, GEO:GSM888400, GEO:GSM1374681, GEO:GSM1670113, IARC_TP53:21633, IARC_TP53:30213, IBRC:C10137, JCRB:JCRB0254, KCLB:80103, LiGeA:CCLE_725, LINCS_LDP:LCL-1535, NCBI_Iran:C615, PharmacDB:MKN45_938_2019, PRIDE:PXD030304, Progenetix:CVCL_0434, PubChem_Cell_line:CVCL_0434, RCB:RCB1001, Wikidata:Q28473066

ID: CVCL_0434

Record Creation Time: 20220427T220810+0000

Record Last Update: 20260829T234633+0000

Ratings and Alerts

No rating or validation information has been found for MKN45.

No alerts have been found for MKN45.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 974 mentions in open access literature.

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

- Liu W, et al. (2026) SEVs-carried ENPP1 regulates DCs' activation and inhibits the formation of tertiary lymphoid structures in gastric cancer. *Journal of gastroenterology*.
- Xie YL, et al. (2026) Ubiquitin Specific Peptidase 48 Deubiquitinates METTL3 to Modulate Ferroptosis in Gastric Cancer Cells. *Molecular carcinogenesis*.
- Liao XL, et al. (2026) Targeting BRD4 in gastric cancer: promoting apoptosis and suppressing tumor progression. *Frontiers in pharmacology*, 17, 1835830.
- Zhong B, et al. (2026) Targeting the SOX9/TIMP1 Axis with iRGD-Conjugated Nanoplatfrom Enhances Dendritic Cell Function and Photodynamic Immunotherapy in Gastric Cancer. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 13(3), e10500.
- Liao F, et al. (2026) Streptococcus anginosus-generated succinate promotes the progression of gastric cancer via the succinate/SUCNR1/ABRAXAS1 axis. *Cell reports*, 45(3), 117047.
- Wang Q, et al. (2026) Serglycin Drives LAG3+ Treg Differentiation and Immunosuppression in Gastric Cancer. *Cancer research*, 86(10), 2395.
- Li C, et al. (2026) ARID1A deficiency unleashes centromeric RNA transcription to drive chromosomal instability and boosts PKMYT1 inhibitor efficacy via RNA sensing. *bioRxiv : the preprint server for biology*.
- Shen X, et al. (2026) A novel circSLIT2-encoded SLIT2 isoform suppresses neural invasion in gastric cancer. *Oncogene*, 45(31), 3181.
- Xiang Z, et al. (2026) CD8a antibody-functionalized biomimetic red blood cell membrane ectosomes delivering C646 reverse CD8??? T Cell exhaustion via H3K18la histone delactylation in gastric cardia adenocarcinoma. *Journal of nanobiotechnology*, 24(1), 156.
- Li L, et al. (2026) The vesicle transport gene SEC23A is a novel prognostic indicator and therapeutic target in gastric cancer. *Frontiers in oncology*, 16, 1728472.
- Zou B, et al. (2026) PIK3R1 as a Gastric Cancer Biomarker Linked to CD73 + Treg-Mediated Immunosuppression. *Oncology research*, 34(2), 17.
- Yu S, et al. (2026) Tumor-Derived Exosomal TAGLN2 Promotes Metastasis by Inducing Vascular Permeability and Angiogenesis via the NRP1/SEMA4D/YAP Axis. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 13(29), e21962.
- Liu W, et al. (2026) DEK recruits KAT6A regulate H3K27ac/c-myc axis to drive enhanced glycolysis and immune escape in gastric cancer. *Free radical biology & medicine*, 255, 35.
- Takano K, et al. (2026) DS-3939a: A TA-MUC1-Directed Antibody-Drug Conjugate with Broad Antitumor Activity. *Molecular cancer therapeutics*, 25(1), 7.
- Wei D, et al. (2026) OSMR coordinates a self-perpetuating circuit linking chemoresistance and neutrophil-driven immunosuppression in gastric cancer. *Neoplasia (New York, N.Y.)*, 73, 101279.

Shanmugam MK, et al. (2026) Bioorthogonal catalytic centres engineered for gastrointestinal stabilization provide oral delivery for the treatment of gastric cancer. *Journal of nanobiotechnology*, 24(1).

Pan G, et al. (2026) Enhancing platinum-based chemotherapy efficacy and safety through combination therapy-mediated remodeling of autophagic homeostasis in gastric cancer. *Cell death & disease*, 17(1).

Santander GN, et al. (2026) Framework for evaluating in vitro vasculogenic mimicry using structural and metabolic parameters. *Cell reports methods*, 101515.

Lu Y, et al. (2026) GAL3ST1-Mediated Histone Tyrosine Sulfation Induced by Cancer-Associated Fibroblasts Promotes Gastric Cancer Metastasis. *Cancer research*, 86(10), 2429.

He J, et al. (2026) UBE2B Drives NF- κ B Signaling and Gastric Cancer Progression through BIRC2-Mediated K63-Linked Ubiquitination of TRAF1. *Molecular cancer research : MCR*, 24(6), 487.