

Resource Summary Report

Generated by [NIF](#) on Aug 1, 2026

FH-TET1-pEF

RRID:Addgene_49792

Type: Plasmid

Proper Citation

RRID:Addgene_49792

Plasmid Information

URL: <http://www.addgene.org/49792>

Proper Citation: RRID:Addgene_49792

Insert Name: Tet methylcytosine dioxygenase 1

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:19372391](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:6200; Vector Backbone:pEF1a; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Please note that compared to GenBank reference sequence NM_030625.2, the TET1 insert in this plasmid contains a SNP at amino acid 1123. The resulting I1223M amino acid change does not affect TET1 expression or catalytic activity.

Plasmid Name: FH-TET1-pEF

Record Creation Time: 20220422T222256+0000

Record Last Update: 20260801T081410+0000

Ratings and Alerts

No rating or validation information has been found for FH-TET1-pEF.

No alerts have been found for FH-TET1-pEF.

Data and Source Information

Usage and Citation Metrics

We found 23 mentions in open access literature.

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

Ren J, et al. (2024) TET1 inhibits the migration and invasion of cervical cancer cells by regulating autophagy. *Epigenetics*, 19(1), 2323751.

Bahabry R, et al. (2024) Alterations in DNA 5-hydroxymethylation patterns in the hippocampus of an experimental model of chronic epilepsy. *Neurobiology of disease*, 200, 106638.

Gao Y, et al. (2023) Quercetin Mediated TET1 Expression Through MicroRNA-17 Induced Cell Apoptosis in Melanoma Cells. *Biochemical genetics*, 61(2), 762.

Zhong R, et al. (2022) Regulation of Ion Channel Function in Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes by Cancer Cell Secretion Through DNA Methylation. *Frontiers in cardiovascular medicine*, 9, 839104.

Li J, et al. (2022) TET1 dioxygenase is required for FOXA2-associated chromatin remodeling in pancreatic beta-cell differentiation. *Nature communications*, 13(1), 3907.

Lin TC, et al. (2022) Optochemical Control of TET Dioxygenases Enables Kinetic Insights into the Domain-Dependent Interplay of TET1 and MBD1 while Oxidizing and Reading 5-Methylcytosine. *ACS chemical biology*, 17(7), 1844.

Emiliani FE, et al. (2022) Multiplexed Assembly and Annotation of Synthetic Biology Constructs Using Long-Read Nanopore Sequencing. *ACS synthetic biology*, 11(7), 2238.

Arguello AE, et al. (2022) Reactivity-dependent profiling of RNA 5-methylcytidine dioxygenases. *Nature communications*, 13(1), 4176.

Zhong R, et al. (2022) Epigenetic mechanism of L-type calcium channel γ -subunit downregulation in short QT human induced pluripotent stem cell-derived cardiomyocytes with CACNB2 mutation. *Europace : European pacing, arrhythmias, and cardiac electrophysiology : journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology*, 24(12), 2028.

Sapozhnikov DM, et al. (2021) Unraveling the functional role of DNA demethylation at specific promoters by targeted steric blockage of DNA methyltransferase with CRISPR/dCas9. *Nature communications*, 12(1), 5711.

Zhong X, et al. (2020) Chrysin Induced Cell Apoptosis and Inhibited Invasion Through Regulation of TET1 Expression in Gastric Cancer Cells. *OncoTargets and therapy*, 13, 3277.

Cao T, et al. (2020) H19/TET1 axis promotes TGF- β signaling linked to endothelial-to-mesenchymal transition. *FASEB journal : official publication of the Federation of American*

Societies for Experimental Biology, 34(6), 8625.

Kojima N, et al. (2020) Quantitative analysis of global 5-methyl- and 5-hydroxymethylcytosine in TET1 expressed HEK293T cells. *Biosensors & bioelectronics*, 167, 112472.

Vincenzetti L, et al. (2019) The contribution of active and passive mechanisms of 5mC and 5hmC removal in human T lymphocytes is differentiation- and activation-dependent. *European journal of immunology*, 49(4), 611.

Teng S, et al. (2019) Hydroxyurea promotes TET1 expression and induces apoptosis in osteosarcoma cells. *Bioscience reports*, 39(5).

Yu Y, et al. (2019) Epigenetic Co-Deregulation of EZH2/TET1 is a Senescence-Countering, Actionable Vulnerability in Triple-Negative Breast Cancer. *Theranostics*, 9(3), 761.

Burr S, et al. (2018) Oxygen gradients can determine epigenetic asymmetry and cellular differentiation via differential regulation of Tet activity in embryonic stem cells. *Nucleic acids research*, 46(3), 1210.

Han X, et al. (2017) TET1 promotes cisplatin-resistance via demethylating the vimentin promoter in ovarian cancer. *Cell biology international*, 41(4), 405.

Duan H, et al. (2017) TET1 inhibits EMT of ovarian cancer cells through activating Wnt/?-catenin signaling inhibitors DKK1 and SFRP2. *Gynecologic oncology*, 147(2), 408.

Tian Y, et al. (2017) Association of TET1 expression with colorectal cancer progression. *Scandinavian journal of gastroenterology*, 52(3), 312.