

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

pEGFP-TRAIL

RRID:Addgene_10953

Type: Plasmid

Proper Citation

RRID:Addgene_10953

Plasmid Information

URL: <http://www.addgene.org/10953>

Proper Citation: RRID:Addgene_10953

Insert Name: Tumor necrosis factor alpha related apoptosis inducing ligand

Organism: Homo sapiens

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:11309289](#)

Vector Backbone Description: Backbone Size:4727; Vector Backbone:pEGFP-C3;
Vector Types:Mammalian Expression; Bacterial Resistance:Kanamycin

Plasmid Name: pEGFP-TRAIL

Relevant Mutation: NA

Record Creation Time: 20220422T221531+0000

Record Last Update: 20260808T080419+0000

Ratings and Alerts

No rating or validation information has been found for pEGFP-TRAIL.

No alerts have been found for pEGFP-TRAIL.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 16 mentions in open access literature.

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

Duranti C, et al. (2025) Antineoplastic Activity of a Novel Trispecific Single-Chain Antibody Targeting the hERG1/??1 Integrin Complex and TRAIL Receptors. *Molecular cancer therapeutics*, 24(10), 1584.

Donohue N, et al. (2025) Production of an Oncolytic Adeno-Associated Virus Containing the Pro-Apoptotic TRAIL Gene Can Be Improved by shRNA Interference. *International journal of molecular sciences*, 26(2).

Vaughan HJ, et al. (2021) Poly(beta-amino ester) nanoparticles enable tumor-specific TRAIL secretion and a bystander effect to treat liver cancer. *Molecular therapy oncolytics*, 21, 377.

Tanrikulu B, et al. (2019) In Vitro Effects of Mesenchymal Stem Cells and Various Agents on Apoptosis of Glioblastoma Cells. *Turkish neurosurgery*, 29(1), 26.

Rinaldi L, et al. (2018) Sonoporation by microbubbles as gene therapy approach against liver cancer. *Oncotarget*, 9(63), 32182.

Malik YS, et al. (2018) Polylysine-modified polyethylenimine polymer can generate genetically engineered mesenchymal stem cells for combinational suicidal gene therapy in glioblastoma. *Acta biomaterialia*, 80, 144.

Han J, et al. (2018) TRAIL-secreting human mesenchymal stem cells engineered by a non-viral vector and photochemical internalization for pancreatic cancer gene therapy. *Biomaterials*, 182, 259.

El Sharkawi FZ, et al. (2017) PTEN and TRAIL genes loaded zein nanoparticles as potential therapy for hepatocellular carcinoma. *Journal of drug targeting*, 25(6), 513.

Tzeng SY, et al. (2016) Polymeric nanoparticle-based delivery of TRAIL DNA for cancer-specific killing. *Bioengineering & translational medicine*, 1(2), 149.

Han Z, et al. (2016) Survivin silencing and TRAIL expression using oncolytic adenovirus increase anti-tumorigenic activity in gemcitabine-resistant pancreatic cancer cells. *Apoptosis : an international journal on programmed cell death*, 21(3), 351.

Kang S, et al. (2015) Silencing Daxx increases the anti-tumor activity of a TRAIL/shRNA Bcl-xL-expressing oncolytic adenovirus through enhanced viral replication and cellular arrest. *Cellular signalling*, 27(6), 1214.

Kang D, et al. (2015) Ratio of phosphorylated HSP27 to nonphosphorylated HSP27 biphasically acts as a determinant of cellular fate in gemcitabine-resistant pancreatic cancer cells. *Cellular signalling*, 27(4), 807.

Wang K, et al. (2015) Nanoparticle-Mediated Target Delivery of TRAIL as Gene Therapy for Glioblastoma. *Advanced healthcare materials*, 4(17), 2719.

Sun X, et al. (2012) Co-delivery of pEGFP-hTRAIL and paclitaxel to brain glioma mediated by an angiopep-conjugated liposome. *Biomaterials*, 33(3), 916.

Sun XY, et al. (2011) MSC(TRAIL)-mediated HepG2 cell death in direct and indirect co-cultures. *Anticancer research*, 31(11), 3705.

Hartung F, et al. (2011) Tumor cell-selective apoptosis induction through targeting of K(V)10.1 via bifunctional TRAIL antibody. *Molecular cancer*, 10, 109.