

Resource Summary Report

Generated by [RRID](#) on Aug 25, 2026

pOpen-T7gene1

RRID:Addgene_165505

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/165505>

Proper Citation: RRID:Addgene_165505

Insert Name: T7 RNA Polymerase

Organism: Other

Bacterial Resistance: Ampicillin

Vector Backbone Description: Vector Backbone:pBuild; Vector Types:Synthetic Biology; Bacterial Resistance:Ampicillin

Comments: Highly processive DNA-dependent RNA polymerase derived from T7 bacteriophage that catalyzes the transcription of class II and class III viral genes. Recognizes a specific promoter sequence and enters first into an 'abortive phase' where very short transcripts are synthesized and released before proceeding to the processive transcription of long RNA chains. Unwinds the double-stranded DNA to expose the coding strand for templating. Participates in the initiation of viral DNA replication presumably by making primers accessible to the DNA polymerase, thus facilitating the DNA opening. Plays also a role in viral DNA packaging, probably by pausing the transcription at the right end of concatemer junction to allow packaging complex recruitment and beginning of the packaging process. The plasmids in the Open Enzyme collection contain genetic parts and are not functional by themselves. Researchers can clone these enzymes into an expression vector of their choice and then transform into E. coli bacteria for expression and purification. Additional information can be found at <https://www.addgene.org/depositor-collections/open-enzyme/>.

Plasmid Name: pOpen-T7gene1

Record Creation Time: 20220422T221934+0000

Record Last Update: 20260815T080929+0000

Ratings and Alerts

No rating or validation information has been found for pOpen-T7gene1.

No alerts have been found for pOpen-T7gene1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.