

Resource Summary Report

Generated by [kravitz2](#) on Aug 12, 2026

pKD-SepRS-EFSep

RRID:Addgene_34623

Type: Plasmid

Proper Citation

RRID:Addgene_34623

Plasmid Information

URL: <http://www.addgene.org/34623>

Proper Citation: RRID:Addgene_34623

Insert Name: SepRS

Organism: Methanocaldococcus maripaludis

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:21868676](#)

Vector Backbone Description: Backbone Marker:Pharmacia; Backbone Size:4300; Vector Backbone:pKK223-3; Vector Types:Bacterial Expression; Bacterial Resistance:Kanamycin

Comments: To prevent possible enzymatic dephosphorylation of O-phospho-L-serine (Sep) in vivo, the gene encoding phosphoserine phosphatase (serB), which is catalyzing the last step in serine biosynthesis, was deleted from Escherichia coli strains Top10 (Top10?serB - Addgene #34928) and BL21 (BL21?serB - Addgene #34929). These strains are required hosts when using this plasmid. Certain elements of this plasmid are covered under US patent 9,090,928 to Yale University

Plasmid Name: pKD-SepRS-EFSep

Record Creation Time: 20220422T222147+0000

Record Last Update: 20260808T081548+0000

Ratings and Alerts

No rating or validation information has been found for pKD-SepRS-EFSep.

No alerts have been found for pKD-SepRS-EFSep.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

DeLey Cox VE, et al. (2019) Incorporation of Modified Amino Acids by Engineered Elongation Factors with Expanded Substrate Capabilities. ACS synthetic biology, 8(2), 287.