

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 4, 2026

pSupAR-MbPyIRS(DiZPK)

RRID:Addgene_91705

Type: Plasmid

Proper Citation

RRID:Addgene_91705

Plasmid Information

URL: <http://www.addgene.org/91705>

Proper Citation: RRID:Addgene_91705

Insert Name: pylS

Organism: Methanosarcina barkeri

Bacterial Resistance: Chloramphenicol

Defining Citation: [PMID:21892184](#)

Vector Backbone Description: Vector Backbone:pSupAR; Vector Types:Bacterial Expression; Bacterial Resistance:Chloramphenicol

Comments: Plasmid for encoding the Methanosarcina barkeri pyrrolysyl-tRNA synthetase (MbPyIRS)/tRNA pair in E. coli which can incorporate the photocrosslinkers DiZPK, DiZSeK, or DiZHSeC into a in-frame amber codon site on a protein of interest. The aminoacyl-tRNA synthetase is engineered to recognize the UAA but not the natural native amino acids, and charge its cognate tRNA with the corresponding UAA. Then, the charged tRNA will insert the UAA at an in-frame amber codon position on a target gene.

Plasmid Name: pSupAR-MbPyIRS(DiZPK)

Relevant Mutation: L274A, C313S

Record Creation Time: 20220422T222620+0000

Record Last Update: 20260902T050519+0000

Ratings and Alerts

No rating or validation information has been found for pSupAR-MbPyIRS(DiZPK).

No alerts have been found for pSupAR-MbPyIRS(DiZPK).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.