

Resource Summary Report

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pIN205

RRID:Addgene_255796

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/255796>

Proper Citation: RRID:Addgene_255796

Insert Name: NrdJ-1C - XtpS

Organism: Xenorhabdus nematophila ATCC 19061

Bacterial Resistance: Spectinomycin and Streptomycin

Vector Backbone Description: Vector Backbone:pCDF; Vector Types:Bacterial Expression; Bacterial Resistance:Spectinomycin and Streptomycin

Comments: This plasmid encodes the termination unit of the non-ribosomal peptide synthetase (NRPS) called xenotetrapeptide synthetase (XtpS), split at an XUTII site and fused to the C-terminal part of the split intein NrdJ-1. When co-expressed with pIN092 and pIN201, the three fragments splice into a functional NRPS that produces the non-ribosomal peptide (NRP) called xenotetrapeptide (XTP; cyclo[Leu-D-Val-Val-D-Val]; CC(C)C[C@H]1C(=O)N[C@@H](C(=O)N[C@H](C(=O)N[C@@H](C(=O)N1)C(C)C)C(C)C)C(C)C; 410.6 g/mol). For successful NRP production, the three plasmids must be co-transformed into an E. coli strain that expresses a broad-spectrum phosphopantetheinyl transferase, such as MtaA (DH10B::mtaA) or Sfp (BAP1), which is required for the post-translational activation of the T domains. Expression is controlled by an araBAD promoter, inducible with 0.2% arabinose.

Plasmid Name: pIN205

Record Creation Time: 20260722T042528+0000

Record Last Update: 20260725T080652+0000

Ratings and Alerts

No rating or validation information has been found for pIN205.

No alerts have been found for pIN205.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.