

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 9, 2026

pMSP3545

RRID:Addgene_46888

Type: Plasmid

Proper Citation

RRID:Addgene_46888

Plasmid Information

URL: <http://www.addgene.org/46888>

Proper Citation: RRID:Addgene_46888

Bacterial Resistance: Erythromycin

Defining Citation: [PMID:10964628](#)

Vector Backbone Description: Backbone Size:8539; Vector Backbone:pMSP3545; Vector Types:Bacterial Expression, Nisin-inducible expression; Gram-positive Bacterial Shuttle Vector; Bacterial Resistance:Erythromycin

Comments: This plasmid utilizes the NIsin Controlled Expression (NICE) system. NICE?? is a registered trademark of NIZO food research BV, P.O.Box 20, 6710 BA Ede, The Netherlands. pMSP3545 contains the Nisin-inducible PnisA promoter, and the pAMB1 replicon for expression in gram-positive bacteria. It also contains a unique NcoI cleavage site immediately downstream of the nisA ribosomal binding sequence, which may be used for translational fusions, and a rho-independent terminator between the XbaI and XhoI sites of the polylinker. For protein expression in *E. faecalis*, induce with 10-25 ng/mL nisin (Sigma, N-5764). See associated article for instructions on how to make nisin solution. Addgene's quality control sequencing finds discrepancies with the depositor's provided sequence, but they are not thought to affect plasmid function.

Plasmid Name: pMSP3545

Record Creation Time: 20220422T222241+0000

Record Last Update: 20260808T081726+0000

Ratings and Alerts

No rating or validation information has been found for pMSP3545.

No alerts have been found for pMSP3545.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Liu Y, et al. (2022) Extracellular vesicle formation in *Lactococcus lactis* is stimulated by prophage-encoded holin-lysine system. *Microbial biotechnology*, 15(4), 1281.

Liu Y, et al. (2022) Physiological Roles of Short-Chain and Long-Chain Menaquinones (Vitamin K2) in *Lactococcus cremoris*. *Frontiers in microbiology*, 13, 823623.

Ng JML, et al. (2022) Mutations in *atpG2* may confer resistance to gentamicin in *Listeria monocytogenes*. *Journal of medical microbiology*, 71(12).

Leenay RT, et al. (2019) Genome Editing with CRISPR-Cas9 in *Lactobacillus plantarum* Revealed That Editing Outcomes Can Vary Across Strains and Between Methods. *Biotechnology journal*, 14(3), e1700583.

Martino ME, et al. (2018) Bacterial Adaptation to the Host's Diet Is a Key Evolutionary Force Shaping *Drosophila*-*Lactobacillus* Symbiosis. *Cell host & microbe*, 24(1), 109.