

Title	Structure and assembly of TP901-1 virion unveiled by mutagenesis
Authors	Stockdale, Stephen R.;Collins, Barry;Spinelli, Silvia;Douillard, François P.;Mahony, Jennifer;Cambillau, Christian;van Sinderen, Douwe
Publication date	2015
Original Citation	Stockdale SR, Collins B, Spinelli S, Douillard FP, Mahony J, Cambillau C, et al. (2015) Structure and Assembly of TP901-1 Virion Unveiled by Mutagenesis. PLoS ONE 10(7): e0131676. doi:10.1371/journal.pone.0131676
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1371/journal.pone.0131676
Rights	© 2015 Stockdale et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited - http://creativecommons.org/licenses/by/4.0/
Download date	2024-02-24 16:48:23
Item downloaded from	https://hdl.handle.net/10468/2303

Strains, phages and plasmids	Relevant features	Source
<i>L. lactis</i>		
NZ9000	MG1363 <i>pepN::nisRK</i>	(51)
NZ9000-Cro _{t712}	NZ9000 with point mutations inserting a BamHI site into prophage t712 anti-repressor (Cro) promoter sequence; contains plasmid pJP005	This study
NZ9000-Cro _{t712} -TP901-1erm	NZ9000-Cro _{t712} displaying t712 phenotype lysogenized with TP901-1erm prophage; contains plasmid pJP005	This study
901-1	Lysogenic host and source of TP901-1 prophage	(13)
3107	Lytic host for phage TP901-1erm	(23)
UC509	Lysogenic host and source of Tuc2009 prophage	(5)
UC509.9	Lytic host for phage Tuc2009	(1, 25)
NZ9700	Nisin over-producing strain	(50)
NZ9000-Cro _{t712} -Portal _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm portal protein (ORF32)	This study
NZ9000-Cro _{t712} -MCP1 _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm MCP1 (ORF33)	This study
NZ9000-Cro _{t712} -MCP2 _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm MCP2 (ORF34)	This study
NZ9000-Cro _{t712} -Sfp _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm Sfp (ORF35)	This study
NZ9000-Cro _{t712} -MHP _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm MHP (ORF36)	This study
NZ9000-Cro _{t712} -MCP3 _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm MCP3 (ORF37)	This study
NZ9000-Cro _{t712} -HTC1 _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm HTC1 (ORF38)	This study
NZ9000-Cro _{t712} -HTC2 _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm HTC2 (ORF39)	This study
NZ9000-Cro _{t712} -Tap _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm Tap (ORF40)	This study
NZ9000-Cro _{t712} -Ttp _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm Ttp (ORF41)	This study
NZ9000-Cro _{t712} -MTP _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm MTP (ORF42)	This study
NZ9000-Cro _{t712} -gpG _{TP901-1} ::Ter	Translation termination codon insertion in TP901-1erm gpG (ORF43)	This study
NZ9000-Cro _{t712} -gpT _{TP901-1} ::BamHI	Insertion mutation in TP901-1erm gpG (ORF43) disrupting gpT (ORF44) production	This study
NZ9000-Cro _{t712} -gpGfsT _{TP901-1}	Insertion and nucleotide altering mutation in TP901-1erm gpG (ORF43) causing a frameshift and permanently fusing it in frame to gpT (ORF44)	This study
Phages		
TP901-1erm	Temperate P335 species phage infecting 3107; contains erythromycin marker	(13, 48, 94)
Tuc2009	Temperate P335 species phage infecting UC509.9	(25)
Plasmids		
pNZ8048	Nisin-inducible protein expression vector	(27)
pTX8049	pNZ8048 derivative expression vector; recombinant N-terminal thioredoxin fusion	(31)
pJP005	pNZ8048 derivative expressing RecT protein required for recombineering mutagenesis	(86)
pNZ8048-Portal _{Tuc2009}	Tuc2009 Portal protein (ORF33) expression construct; Genbank coordinates 16486-17847	This study
pNZ8048-MCP1 _{Tuc2009}	Tuc2009 MCP1 (ORF34) expression construct; Genbank coordinates 17844..18884	This study
pTX8049-MCP2 _{Tuc2009}	Tuc2009 MCP2 (ORF35) expression construct; Genbank coordinates 18930..19262	This study
pNZ8048-Sfp _{Tuc2009}	Tuc2009 Sfp (ORF36) expression construct; Genbank coordinates 19388..20050	This study
pTX8049-MHP _{Tuc2009}	Tuc2009 MHP (ORF37-39) expression construct; Genbank coordinates 20052..22183	This study
pTX8049-MCP3 _{Tuc2009}	Tuc2009 MCP3 (ORF40) expression construct; Genbank coordinates 22183..22383	This study
pTX8049-HTC1 _{Tuc2009}	Tuc2009 HTC1 (ORF41) expression construct; Genbank coordinates 22367..22699	This study
pTX8049-Tap _{Tuc2009}	Tuc2009 Tap (ORF43) expression construct; Genbank coordinates 23004..23330	This study