

Supplemental material

Table S1: Bacterial Strains and plasmids used in this study

Bacterial strain	Genotype/description	Source/reference
<i>B. cepacia</i> complex strains		
<i>B. cenocepacia</i> H111	CF isolate, prototroph.	[1, 2]
<i>B. cenocepacia</i> H111Δc3	<i>B. cenocepacia</i> H111, pC3 deletion mutant.	[3]
<i>B. cenocepacia</i> H111-hfe3	<i>B. cenocepacia</i> H111 bearing <i>lacI</i> and <i>aacI</i> on pC3 and <i>dhfrII</i> under the control of LacI-repressed promoter pMT on chromosome 1.	This study
<i>B. cenocepacia</i> K56-2	CF isolate, prototroph, BCESM ⁺ <i>cbIA</i> ⁺ .	[4]
<i>B. cenocepacia</i> K56-2ΔpC3/pBBRatoxA	<i>B. cenocepacia</i> K56-2, pC3 deletion mutant containing pBBRatoxA.	This study
<i>B. multivorans</i> LMG18825	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. multivorans</i> LMG18825ΔpC3	<i>B. multivorans</i> LMG18825, pC3 deletion mutant.	This study
<i>B. contaminans</i> LMG23361	Isolate from milk of sheep with mastitis, prototroph.	BCCM/LMG Bacteria Collection
<i>B. contaminans</i> LMG23361ΔpC3	<i>B. contaminans</i> LMG23361, pC3 deletion mutant.	This study
<i>B. diffusa</i> LMG24065	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. diffusa</i> LMG24065ΔpC3	<i>B. diffusa</i> LMG24065, pC3 deletion mutant.	This study
<i>B. latens</i> LMG24064	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. latens</i> LMG24064ΔpC3	<i>B. latens</i> LMG24064, pC3 deletion mutant.	This study
<i>B. metallica</i> LMG24068	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. metallica</i> LMG24068ΔpC3	<i>B. metallica</i> LMG24068, pC3 deletion mutant.	This study
<i>B. seminalis</i> LMG24067	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. seminalis</i> LMG24067ΔpC3	<i>B. seminalis</i> LMG24067, pC3 deletion mutant.	This study
<i>B. arboris</i> 24066	Soil isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. arboris</i> 24066ΔpC3	<i>B. arboris</i> 24066, pC3 deletion mutant.	This study
<i>B. stabilis</i> LMG7000	Blood isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. stabilis</i> LMG7000 ΔpC3	<i>B. stabilis</i> LMG7000, pC3 deletion mutant.	This study
<i>B. dolosa</i> LMG18943	CF isolate, prototroph.	BCCM/LMG Bacteria Collection
<i>B. dolosa</i> LMG18943 ΔpC3	<i>B. dolosa</i> LMG18943, pC3 deletion mutant.	This study

E. coli strains

CC118(λ pir)	$\Delta(ara, leu)_{7697} araD139 \Delta lacX74 galE galK phoA20 thi-1 rpsE rpoB(Rf^R) argE(am) recA1 \lambda pir^+$	[5]
MC1061	$hsdR araD139 \Delta(ara-leu)_{7697} \Delta lacX74 galU galK rpsL (Sm^R)$	[6]
XL1-blue	$endA1 gyrA96(nal^R) thi-1 recA1 relA1 lac glnV44 F' [::Tn10 proAB^+ lacI^q \Delta(lacZ)M15] hsdR17(r_K^- m_K^+)$	Stratagene

Plasmids

pMinic3	Mobilisable vector consisting of the <i>B. cenocepacia</i> H111 c3 replicatory region and pEX18Tp.	[3]
pSHAFT2	Broad-host-range suicide plasmid (Cm^R), mobilisable for conjugation.	S. Shastri and M.S.Thomas, manuscript in preparation
pEX18Tp	pEX18 containing <i>dhfrIII</i> (Tp^R) between <i>EcoRV</i> and <i>AatII</i> sites.	[3]
pEX18Gm	$sacB^+$, mobilisable gene replacement vector with MCS from pUC18, Gm^R .	[7]
pBBR1MCS	Mobilizable BHR cloning vector; IncP and ColE1 compatible (Cm^I).	[8]
pSHAFT2-gabD	pSHAFT2 bearing an amplified fragment of H111 pC3.	This study
pBBR1MCS-atox2	pBBR1MCS bearing the <i>atox2a</i> , <i>atox2b</i> and <i>tox2</i> TAS. Intermediate vector for pBBR1MCS:: <i>atoxA</i> construction.	This study
pBBR1MCS-atox2-atox1	pBBR1MCS bearing the <i>atox2a</i> , <i>atox2b</i> and <i>tox2</i> TAS and the <i>atox1</i> antitoxin gene. Intermediate vector for pBBR1MCS:: <i>atoxA</i> construction.	This study
pBBR1MCS:: <i>atoxA</i>	pBBR1MCS bearing the <i>atox2a</i> , <i>atox2b</i> and <i>tox2</i> TAS, and the <i>atox1</i> and <i>atox3</i> antitoxin genes	This study
pBBR1MCS-pMT-Tp	pBBR1MCS bearing <i>dhfrIII</i> under the control of the <i>LacI</i> -controlled pMT promoter. Intermediate vector for pEX18Gm-pMT-Tp- <i>queF</i> construction.	This study
pEX18Gm-pMT-Tp- <i>queF</i>	pEX18 bearing <i>dhfrIII</i> under the control of the <i>LacI</i> -controlled pMT promoter	This study
pBS-pJ23109- <i>lacI</i>	pBLUESCRIPTIIKS bearing <i>lacI</i> under the control of promoter <i>pJ23109</i> . Intermediate vector for pSHAFT2-noncon-pJ23109- <i>lacI</i> - <i>aacI</i> construction.	This study
pSHAFT2-noncon-pJ23109- <i>lacI</i> - <i>aacI</i>	pSHAFT2 bearing <i>lacI</i> under the control of promoter <i>pJ23109</i> , flanked by regions amplified from pC3.	This study
pBluescriptIIKS	High copy number cloning vector (Ap^R).	Stratagene
pRK2013	Helper plasmid for conjugation (Km^R), ColE1 replicon.	[9]

Abbreviations used within this table: Gm^R , gentamycin resistance; Rf^R , rifampicin resistance; Sm^R , streptomycin resistance; Tp^R , trimethoprim resistance; Cm^R , chloramphenicol resistance; Km^R , kanamycin resistance; Ap^R , ampicillin resistance.

TABLE S2 Oligonucleotides used in this study

Primer name	Sequence (5'-3')	Reference/ notes
For diagnosing pC3 presence		
repAFor	AACAGCAACAACACCAAGTA	This study
repARev	TTGCTTGCCTTCTTCTTCG	This study
oriCFor1	ACCCATTTATGGGAGCACAG	[3]
oriCRev1	TGCTCCAGCATCACTTTCAC	[3]
dolpC3repAFor	CGGGCTGAACAGTAACAATA	This study
dolpC3repARev	GCTTGCTCGCTT TCT TTTTC	This study
For cloning		
queFXhoFor	GCGCCTCGAGGTTCAAGCTGTATCTCGGCT	This study
queFKpnRev	GCGCGGTACCATCGGCTGGTTGTAGTTGGT	This study
queFdownxbaFor 2	GCGCTCTAGATTACTTCGCCGGCGCCTTGT	This study
queFdownPstRev2	GCGCCTGCAGGCAACAACCAGATGGACCGC	This study
MikeTFor	GTACCTTTATCAAAAAGAGTGTGACTTGTGAGCGGATAACAAT GATACTTAGATTCAATTGTGAGCGGATAACAATTTACACAGC	[10] Oligonucleotides annealed to form double stranded insert.
MikeTRev	TCGAGCTGTGTGAAATTGTTATCCGCTCACAATTGAATCTAAGT ATCATTTGTTATCCGCTCACAAGTCAACACTCTTTTTGATAAAG	
dhfrFor	GCGCAAGCTTACAAGAAGGATTCGACATGG	This study
dhfrRev	GCGCGGATCCCTTAGGCCACACGTTCAAGTG	This study
dsJ23109For2	CAGCTAGCTCAGTCCCTAGGGACTGTGCTAGCA	Registry of Standard Biological Parts.
dsJ23109Rev2	AGCTTGCTAGCACAGTCCCTAGGACTGAGCTAGCTGGTAC	Oligonucleotides annealed to form double stranded insert.
GmSmaFor	GCGCCCCGGGAAACTGTAATGCAAGTAGCG	This study
GmSacIRev	GCGCGAGCTCCGAATTGTTAGGTGGCGGTA	This study
lacI_HindFor	GCGCAAGCTTACGGGTAGCAAAACAGATCG	This study
lacI_PstRev	GCGCCTGCAGTATCCGCTCACAATTCCACA	This study
gabDXbaFor	GCGCTCTAGAGGCGACGTTGAAGAAATTG	This study
gabDBglRev	GCGCAGATCTGTGTAGAAATAGGCGGCGA	This study
Atox1KpnI_F	GCGCGGTACCGATGTTGCGAAAGATGTCG	This study
Atox1ClaI_R	GCGCATCGATTTCGTCTTGAGCGAAATAGC	This study
Atox2PstI_F	GCGCCTGCAGCTGATCCCGACTATCTTCC	This study
Atox2BamHI_R	GCGCGGATCCACATTTGGTGGAAACGCTA	This study
Atox3SacI_R	GCGCGAGCTCGTTCCGGCATAACGTTTCGTTA	This study
Atox3XbaI_F	GCGCTCTAGACCATTCGCCAGATAACTA	This study
For species identification by <i>recA</i> sequencing		
BUR1	GATCGARAAGCAGTTCGGCAA	[11]
BUR2	TTGTCCCTTGCCCTGRCCGAT	
For differentiating between H111 and K56-2 cells		
R33For		Anneal to the H111, and not to the K56-2, genome
R33Rev		
cbICFor	GATTACATAAGCCAGCGTC	Anneal to the <i>cbIC</i> gene, present in K56-2
cbICRev	ACGCATCAACGTCAATTTTC	

TABLE S3 Laboratory collection strains screened for pC3 presence

Species/ Strain ID	Characteristics	Source/ Reference
<i>Burkholderia ambifaria</i>		
LMG17828	Isolated from corn roots	[12]
LMG19182	Rhizosphere organism, effective in stimulating plant growth and suppressing soil borne plant pathogens, AMMD	[12]
LMG19467	Isolated from CF patient, Australia	[13]
<i>Burkholderia anthina</i>		
LMG20980	Type strain; soil rhizosphere	[13]
LMG20983	Isolated from CF patient, UK	[13]
LMG21821	Isolated from CF patient, USA	BCCM/LMG collection
<i>Burkholderia arboris</i>		
LMG24066	Type strain; isolated from soil in Philadelphia, USA	[14]
<i>Burkholderia cenocepacia</i>		
LMG18826	BC7, R-3220, type strain, GV IIIA (ET-12); CF isolate, Canada	BCCM/LMG collection
LMG12615	GV IIIA (ET-12), Cbl ⁺ , BCESM ⁺ ; CF isolate, UK	[15]
LMG16659	GV IIIB, Cbl ⁻ , BCESM ⁺ ; CF isolate, UK	[15]
LMG14271	GV IIIB; isolated from CF patient, Belgium	[15]
LMG6981	GV IIIA; bronchial washing isolate, USA	[15]
LMG16655	GV III	Laboratory strain collection
LMG16657	GV III	Laboratory strain collection
R6108	GV III	Laboratory strain collection
R651	GV III	Laboratory strain collection
LMG24308	MCO-3; isolated from a research field, maize rhizosphere, USA	BCCM/LMG collection
LMG24506	GV IIIB, PHDC lineage, CF isolate, USA	BCCM/LMG collection
LMG24507	H12424, soil isolate, GV IIIB, PHDC lineage, New York, USA	BCCM/LMG collection
H147	GV III, R-6274	Laboratory strain collection
<i>Burkholderia cepacia</i>		
LMG1222	Type strain, isolated from onion, USA	[16]
IST408	CF isolate, Portugal	Laboratory strain collection
H125	Isolated from CF patient, Germany	Laboratory strain collection
H194	Isolated from CF patient, Germany	Laboratory strain collection
LMG18821	GV I, R-1464	BCCM/LMG collection
LMG6963	GV I	[15]
LMG14087	GV I	Laboratory strain collection
S3.1	Isolated from a painting facility	Laboratory strain collection
RA231	Isolated from a painting facility	Laboratory strain collection
HH156.3	Isolated from a painting facility	Laboratory strain collection
BASF	Isolated from a painting facility	Laboratory strain collection
speaky5	Isolated from a painting facility	Laboratory strain collection
speaky6	Isolated from a painting facility	Laboratory strain collection
speaky8	Isolated from a painting facility	Laboratory strain collection
W220	Isolated from a painting facility	Laboratory strain collection
ATCC25416	LMG1222, type strain, GV I	ATCC strain collection
BC2A	Clinical isolate	Laboratory strain collection
<i>Burkholderia contaminans</i>		
LMG23361	Isolated from sheep with mastitis (milk), Spain	BCCM/LMG collection
<i>Burkholderia diffusa</i>		
LMG24065	Isolated from CF patient, USA	BCCM/LMG collection
<i>Burkholderia dolosa</i>		
LMG21819	Isolated from CF patient, USA	BCCM/LMG collection
LMG18941	Isolated from CF patient, USA	BCCM/LMG collection
LMG18942	Isolated from CF patient, USA	BCCM/LMG collection
LMG18943	Isolated from CF patient, USA	BCCM/LMG collection

LMG18944	Isolated from CF patient, USA	BCCM/LMG collection
LMG18946	Isolated from CF patient, USA	BCCM/LMG collection
LMG21443	Isolated from <i>Alysicarpus glumaceus</i> (root nodule), Senegal	BCCM/LMG collection
LMG21820	Isolated from CF patient, UK	BCCM/LMG collection
LMG18943	Type strain; isolated from CF patient, USA	[17]
<i>Burkholderia lata</i>		
LMG6993	DSMZ 50180; Isolated from soil in Trinidad	[18]
LMG22485	Type strain; Isolated from forest soil in Trinidad and Tobago	BCCM/LMG collection
<i>Burkholderia latens</i>		
LMG24064	Type strain; isolated from CF patient, Italy	BCCM/LMG collection
<i>Burkholderia metallica</i>		
LMG24068	Type strain; isolated from CF patient, USA	BCCM/LMG collection
<i>Burkholderia multivorans</i>		
LMG18825	Isolated from CF patient, UK	BCCM/LMG collection
LMG17588	Soil enriched with anthranilate	BCCM/LMG collection
LMG16665	Isolated from brain abscess, UK	BCCM/LMG collection
LMG18945	Isolated from CF patient, UK	BCCM/LMG collection
R139	GV II	Laboratory strain collection
R654	GV II	Laboratory strain collection
H59	GV II	Laboratory strain collection
H107	GV II	Laboratory strain collection
H115	GV II, R-6269	Laboratory strain collection
H131	GV II	Laboratory strain collection
H132	GV II	Laboratory strain collection
H133	GV II	Laboratory strain collection
H158	GV II, R-6275	Laboratory strain collection
H174	GV II, R-6278	Laboratory strain collection
H179	GV II	Laboratory strain collection
H191	GV II, R-6284	Laboratory strain collection
LMG16660	Isolated from CF patient, UK	BCCM/LMG collection
LMG18822	Isolated from CF patient, Canada	BCCM/LMG collection
LMG18824	Isolated from a chronic granulomatous disease patient	BCCM/LMG collection
R1914	GV II	Laboratory strain collection
<i>Burkholderia pyrrocinia</i>		
LMG14191	Type strain; isolated from soil	BCCM/LMG collection
LMG21822	Isolated from cornfield soil	BCCM/LMG collection
LMG21823	Isolated from water	BCCM/LMG collection
<i>Burkholderia seminalis</i>		
LMG24067	Type strain; isolated from CF patient, USA	[14]
<i>Burkholderia stabilis</i>		
LMG7000	Isolated from blood, Sweden	BCCM/LMG collection
LMG14291	isolated from CF patient, Belgium	BCCM/LMG collection
R6270	GV IV, H118	Laboratory strain collection

H134	GV IV	Laboratory strain collection
H145	GV IV, R-6273	Laboratory strain collection
H162	GV IV, R-6276	Laboratory strain collection
H173	GV IV, R-6277	Laboratory strain collection
H175	GV IV, R-10033	Laboratory strain collection
H177	GV IV, R-6279	Laboratory strain collection
H193	GV IV, R6280	Laboratory strain collection
H236	GV IV	Laboratory strain collection
H177 Epi	GV IV, R-6281	Laboratory strain collection
LMG6997	Isolated from ear infection, Sweden	BCCM/LMG collection
LMG18138	isolated from CF patient, Belgium	BCCM/LMG collection
LMG14294	Type strain, isolated from CF patient, Belgium	BCCM/LMG collection
R3338	GV VI	[19]
<i>Burkholderia ubonensis</i>		
LMG20358	Type strain; isolated from surface soil, Thailand	[16]
LMG24263	Isolated from a nosocomially infected patient, Thailand	BCCM/LMG collection
<i>Burkholderia vietnamiensis</i>		
LMG18835	isolated from CF patient, USA	BCCM/LMG collection
LMG18836	Isolated from patient suffering from chronic granulomatous disease, Canada	BCCM/LMG collection
LMG6998	Isolated from blood, Sweden	BCCM/LMG collection
LMG10929	Type strain; isolated from rhizosphere of rice	BCCM/LMG collection
LMG16232	isolated from CF patient, Sweden	BCCM/LMG collection
LMG 6999	Isolated from a neck abscess, Chile	BCCM/LMG collection
R921	Type strain, GV V	Laboratory strain collection
R128	Type strain, GV V	[2]
R706	Type strain, GV V	Laboratory strain collection
R723	Type strain, GV V	Laboratory strain collection
R1904	Type strain, GV V	
LMG18835	isolated from CF patient, USA	BCCM/LMG collection
G4		Laboratory strain collection
Strains included as negative controls		
<i>Burkholderia gladioli</i>		
H129		Laboratory strain collection
<i>Burkholderia phymatum</i>		
LMG21445	Type strain; isolated from root nodule, French Guiana	BCCM/LMG collection
<i>Burkholderia tuberum</i>		
LMG21444	Type strain; isolated from root nodule, South Africa	BCCM/LMG collection

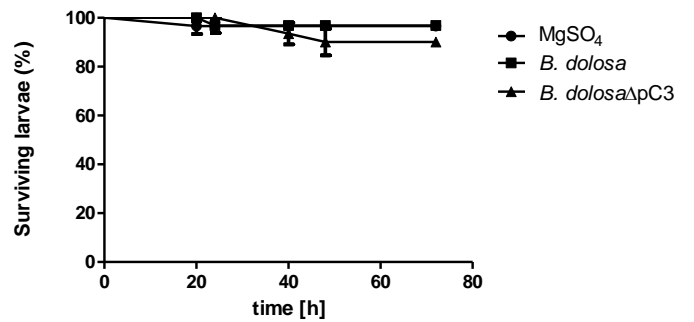
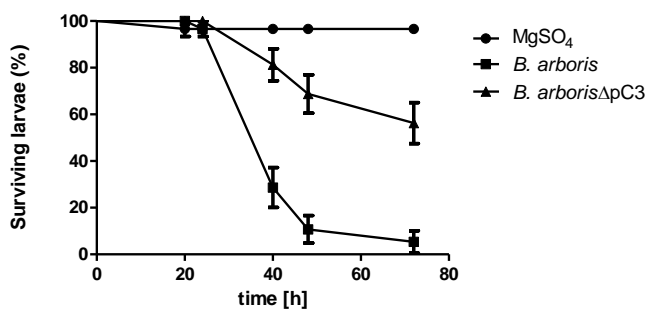
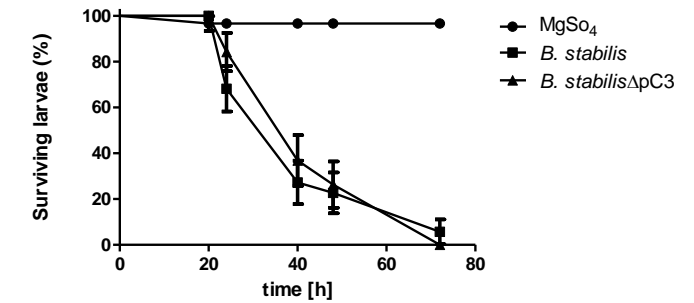
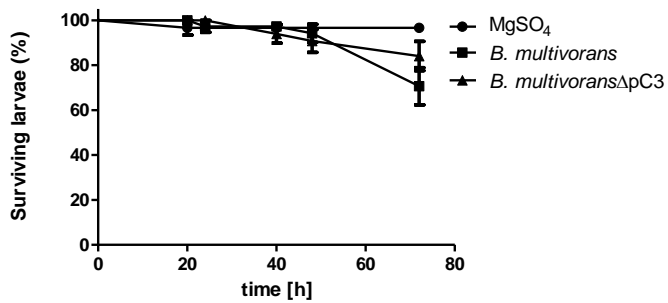
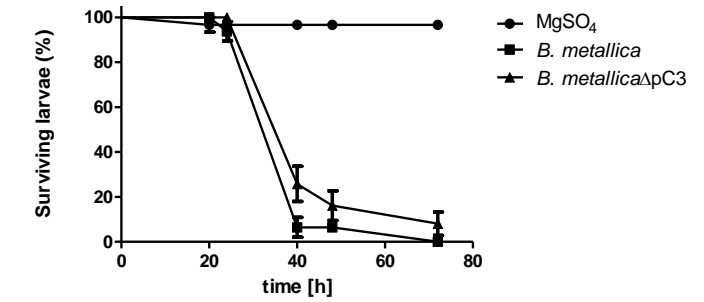
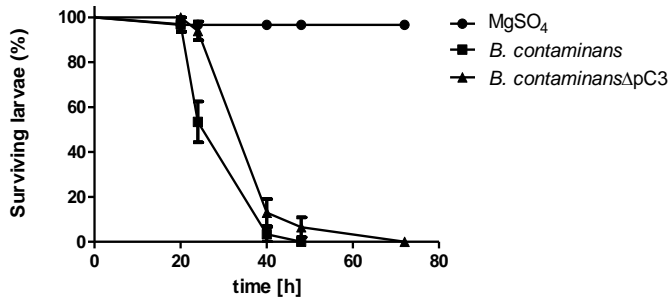
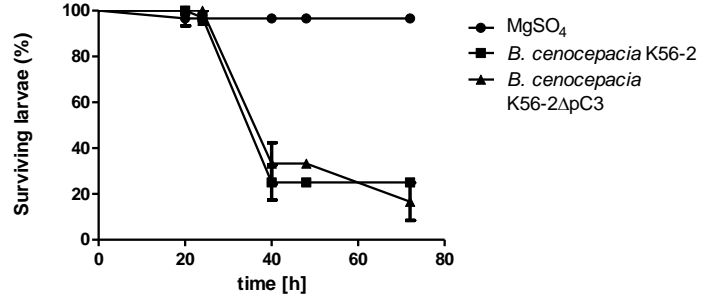
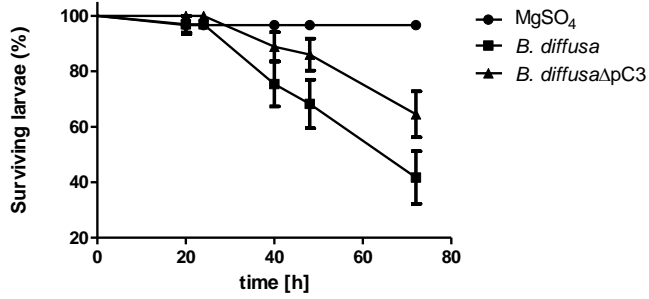
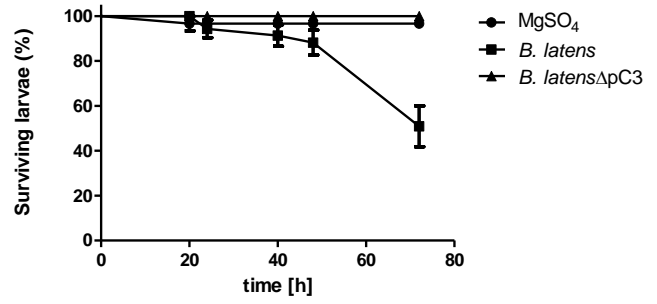
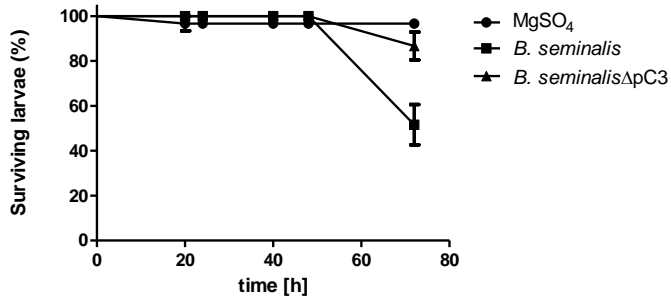


FIG S1 WT Bcc strains show higher pathogenicity to *G. mellonella* than their pC3-null derivatives. *G. mellonella* pathogenicity assay with different strains of the Bcc and their Δ pC3 mutants. 10 μ l of the particular strains were injected and dead/ live larvae were counted after 20, 24, 40, 48 and 72 hrs post-infection. Each experiment used 10 larvae and was carried out three times at 30°C.

psaB

CTGCAGCGTCGGCGGTGGTCGCCGGTAGCTCGCCCTTGCTTTTTCATATTCTTACCATAAAGTAAGGAATATTGGAGGTG
CCGCAAATGACAGCAGCTACTATTACTTCAAAGGGTCAGGTGACCATTCCGGTGGATGTACGCAATCAACTAGGCCTGGA
GTCCGGAGACCGGATCGAATTCAGCTTCAACGAGGCAACGGGCCGGTATGAGATCTACCCGGCCACGCGCTCGCTCGCCT
CGCTCAAGGGCATCGTGAAAAAGCCCGAGAAATCGGTGTCAATCGAGGACATGAATCGGGCCATCGCCGAACAGGGAGC
GTCCGCGCGATGA

psaA

ATGATAGGACTGGATACGAACGTGCTGGTCCGCTATTTTCGCTCAAGACGATGCCGTGCAATCAAAGAGGGCGACCGCGCT
GATGGAGTCGTTGTCGGCGGAGCGTCCGGGGTACGTTTCGAGGTGGCGCTGGTCGAGGTCGTCTGGGTGCTGGGACGT
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GCACACGTCGTGGGTGCGAGTACACAGCAACCTTCGACGTGGCCGCTCAAAGGTCGCTGGCATGCGGTTGATAAAGTA
A

psbB

ATGTGGTTCTGGCAGCACCAACCTCGGATCGCCAGAACCAATTTGCTGGCCAGTTCCTGGCCAGCGTTTTTTTATTCCTCG
AGCCGATCTCGTCGGCTCGTTTGCCGGGCGCTTATCCGGACAAACCGAAAGACCGTTTTGTTCCGGGAATTCGTTAGAGC
GAGGCGAGCGGTGGCTGGATGACCGCTCGTTTTGCGCGGATCCTTTATCGGGTAA

psbC

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TCCGTCTGTACGCGCAGGCCGTCTAATGCATGTGGTTCTGGCAGCACCAACCTCGGATCGCCAGAACCAATTTGCTGGCC
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GGTAAGGTCAGGCAACGCTGCATCGGTAGCGGCACATCGGACACTGTCCCACGCATCGCGTCAATCGCGTCAGCTCC
ATGCCCTGA

psbA

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CCGTCACGCACGCCGACGCCGAAGCGCTCGTCGCGATCCGCATCGCCGCGATGCGCGACAGCCTCGCGCGCATCGGCCGT
TTCGATCCGCGAGCGTGCAGCGGAGCGGTTTTCTCGCGTCTTCGATCCGGCGCGATGCCGTTTTGTCGAAGTCGACCATTCG
CGTGCGGGTTTTCTACACGCTTCGCCCAGGGCGGATCACTGTTGCTCGACCATCTGTACATCGTCCCGCGCATCAGGG
GAAGGGCATCGGCGCCGCCGTGCTGCGCGAGATTTGGCCGAAGCCGACGAACACCGGATGCCCGTTCACGTCGGCGCG
CTGCGCGGCGAGCGACTCGAACCCTTCTACGAACGGCATGGCTTCGTGCGAACCAGGCGAAGCGGAATGGGACATCTACTA
CCGGCGGAACCGGGCACGGCGACGACGTAG

pscA

ATGCACTAGCGATGCTTTCTTGATCTGGTCCGCGCCGCAACCAGGACAGCATTTGGCCTTTTCTTTTTGCTCATCTTTTATG
CACCAGAGATCACATGAACGCACATTTCCGCACTTTTAGAGCGCCCCCTATTGGGGCGGCGCTGAATAGTGCCTGGTTCGA
GATTATACCCACCCGCAACATCACGCGGATGAAGACCCACACATCCTTGCAGCAGCGCTTCGGAGCGCGGTTAGACAG
CTTCGGAAAGAGAAGACGGACCTTAGCCAAGAAGCCTTCGCCGATAAAGTCGGCTTTGCCGCTCCTACTTCGGTTCGGGT
CGAAACGGGCAAGGCGAACCCATCACTCGATGCAATTCAAACCATCGCGGAAGGTTGGGCGTCAAGTGAGCGCTCTTT
TCGAGGACGACGATTAG

FIG S2 Putative toxin antitoxin gene sequences identified on pC3_{K56-2} using RASTA Bacteria.

TABLE S4 Phenotypic microarray results showing carbon utilisation phenotypes (Biolog plate PM1) that differ between wt strains and their pC3-null derivatives¹².

Phenotype observed	<i>B. cenocepacia</i>			<i>B. ambifaria</i>	<i>B. anthina</i>	<i>B. vietnamiensis</i>	<i>B. pyrrocinia</i>	<i>B. lata</i>	<i>B. ubonensis</i>	<i>B. arboris</i>	<i>B. metallica</i>	<i>B. semihalis</i>	<i>B. contortinans</i>	<i>B. diffusa</i>	<i>B. stabilis</i>	<i>B. multivorans</i>	<i>B. latens</i>	<i>B. dolosa</i>	
	H111	MCO-3	H12424	K56-2	AMMD	LMG20983	LMG10929	LMG14191	383	LMG20358	LMG24066	LMG24068	LMG24067	LMG23361	LMG24065	LMG7000	LMG18825	LMG24064	LMG18943
PM1																			
D-xylose	+++	+++	+++	+++	+++	+++	+++		+++				+++	+++				+++	
thymidine	+++	+++	+++	+			+	+	+										
tricarballic acid		+++		+++								+++				+++	+++	+++	
D-aspartic acid					+++		+++			+++				+++					
Succinic acid							++	+											+
D-galacturonic acid							+++					+						+	
p-hydroxyphenylacetic acid								+										+	+
M-tartaric acid								+++							+++				
D-cellobiose	+						++												
m-hydroxyphenylacetic acid						+													
2-amino ethanol										-					-				
D-trehalose							+												
D-threonine		+																	
L-alanyl glycine					-								+						
D-galactonic acid-γ-lactone							+												
D-glucuronic acid							+			-									
L-lactic acid							+												
D-mannitol							+												
D-fructose-6-phosphate							++												
maltose							+												
D-melibiose							++												
α-D-lactose							+												
lactulose							+++												
uridine							+												
α-hydroxy glutaric acid-γ-lactone							+												
maltotriose							++												
2-deoxy adenosine							++												
glycolic acid							+												
glyoxylic acid							+												
inosine							+												
N-acetyl-b-D-mannosamine							+												
D-psicose							+												
glucuronamide							+												
Tween 40		+																	
D-ribose		+																	
tyramine			-																
D-mannose							-												
D-glucose-6-phosphate							+												
dulcitol							+												
D,L-malic acid										-									
L-glutamic acid										-									
L-malic acid										-									
α-keto butyric acid												+							
α-hydroxybutyric acid												+							
formic acid												+							
L-galactonic acid-γ-lactone														+++					
propionic acid													+						
methyl-pyruvate															+				
L-threonine																		+	
pyruvic acid																			+

¹Differences in respiration between WT and c3-null derivative have been scored as follows: +++, wt OD₅₉₀ > 4 x c3-null OD₅₉₀; ++, wt OD₅₉₀ > 3 x c3-null OD₅₉₀; +, wt OD₅₉₀ > 2 x c3-null OD₅₉₀; ---, c3-null OD₅₉₀ > 4 x wt OD₅₉₀; --, c3-null OD₅₉₀ > 3 x wt OD₅₉₀; -, c3-null OD₅₉₀ > 2 x wt OD₅₉₀.

²Phenotypes which are influenced by c3 in more than two species have been shaded.

TABLE S5 Phenotypic microarray results showing carbon utilisation phenotypes (Biolog plate PM2a) that differ between wt strains and their pC3-null derivatives^{1, 2}.

Phenotype observed	<i>B. cenocepacia</i>			<i>B. ambifaria</i>	<i>B. anthina</i>	<i>B. vietnamiensis</i>	<i>B. pyrrocinia</i>	<i>B. lata</i>	<i>B. ubonensis</i>	<i>B. arboris</i>	<i>B. metallica</i>	<i>B. semihalis</i>	<i>B. contortinans</i>	<i>B. diffusa</i>	<i>B. stabilis</i>	<i>B. multivorans</i>	<i>B. latens</i>	<i>B. dolosa</i>	
	H111	MCO-3	H12424	K56-2	AMMD	LMG20983	LMG10929	LMG14191	383	LMG20358	LMG24066	LMG24068	LMG24067	LMG23361	LMG24065	LMG7000	LMG18825	LMG24064	LMG18943
PM2a																			
caproic acid	+++	+	++	+++	+++	+	+	+	+++	+	+	+++	+++	+++	+++	+	+++	+++	+++
butyric acid	+++			++	+	+	+		+	++	+	+	++	+	+		+	++	++
sorbic acid	+			++	+	-			++	+	++		+	+	++	+			
L-isoleucine	+++	+++	+++	++	+++		++		++	+++							+		
L-lysine			+	++	+		+	+		+	+		+						
2-deoxy-D-ribose				++			+	++	+++			+			++				
putrescine	++			++			+	+++							+++				
hydroxy-L-proline				+++	+++									+++		+++	+++	+++	+++
gelatin	+++	+	+++							++					+				
citraconic acid	+++	+	++										+						
capric acid				++			++	++						+++					
salicin							+	++			+++		+++						
δ-Amino Valeric Acid		+++	+++				+												
pectin	+++		-				++						+						
2,3-butanediol			+				+								+				
L-ornithine	+++		+++							+									
arbutin								+++			+++		+++						
I-arabitol							+					++							
Itaconic acid						-									+++				
succinamic acid			+				+												
L-methionine			++				++												
2,3-butanone			+				+												
5-keto-D-gluconic acid	+		-																
D-ribono-1,4-lactone		+																	
2-hydroxybenzoic acid								+											
laminarin							+												
I-erythritol							+												
β-methyl-D-xyloside							+												
palatinose							+												
β-methyl-D-galactoside							+												
γ-hydroxy butyric acid							+												
L-leucine							++												
oxalomalic acid							+												
3-hydroxy-2-butanone							++												
lactitol			+																
γ-cyclodextrin							+												
maltitol							+												
L-pyrogutamic acid								+											
Citramalic acid								+											
D-arabitol																			
L-tartaric acid												-							
quinic acid																		+++	
D-arabinose																			+
arginine				++															
D-lactic acid methyl ester				-															

¹Differences in respiration between WT and c3-null derivative have been scored as follows: +++, wt OD₅₉₀ > 4 x c3-null OD₅₉₀; ++, wt OD₅₉₀ > 3 x c3-null OD₅₉₀; +, wt OD₅₉₀ > 2 x c3-null OD₅₉₀; ---, c3-null OD₅₉₀ > 4 x wt OD₅₉₀; --, c3-null OD₅₉₀ > 3 x wt OD₅₉₀; -, c3-null OD₅₉₀ > 2 x wt OD₅₉₀.

²Phenotypes which are influenced by c3 in more than two species have been shaded.

TABLE S6 Phenotypic microarray results showing nitrogen utilisation phenotypes (Biolog plate PM3b) that differ between wt strains and their pC3-null derivatives¹².

Phenotype observed	<i>B. cenocepacia</i>				<i>B. ambifaria</i>	<i>B. anthina</i>	<i>B. vietnamiensis</i>	<i>B. pyrrocinia</i>	<i>B. lata</i>	<i>B. ubonensis</i>	<i>B. arboris</i>	<i>B. metallica</i>	<i>B. semihalis</i>	<i>B. contaminans</i>	<i>B. diffusa</i>	<i>B. stabilis</i>	<i>B. multivorans</i>	<i>B. latens</i>	<i>B. dolosa</i>
	H111	MCO-3	H12424	K56-2	AMMD	LMG20983	LMG10929	LMG14191	383	LMG20358	LMG24066	LMG24068	LMG24067	LMG23361	LMG24065	LMG7000	LMG18825	LMG24064	LMG18943
PM3b																			
histamine	+++	+++	+++	+++	++		++	+++	+++		++	+	++		++		+		
uracil	+++	+++	+++			++		++	+	++									+
cytidine	+		+							++	+			+		+			
thymidine	+	+++	+++					++		++									
thymine	+++	++	+++					++											
L-methionine		-		+	-		-												
ammonia			+++				+			-							++		
alloxan	-	-	+																
cytosine						+			+				++						
xanthine											+	+					-		
D-aspartic acid					++			+++							++				
ε-Amino-N-caproic acid	-				-														
nitrate						-													
biuret		---					-												
guanosine					-		++												
Ala-Asp							+					+							
putrescine									++										-
N-acetyl-D-galactosamine	+																		
D-galactosamine	+++																		
xanthosine		-																	
N-acetyl-D-mannosamine		-																	
uridine		+																	
Gly-Glu							+												
Met-Ala							++												
urea									+										
Ala-gly					-														
Ethylenediamine								++											
D-L-α-amino-N-butyric acid							+												
adenine									+										
L-pyroglutamic acid																			
D-asparagine																			
agmatine																			+
ala-glu													+						
acetamide													+						
inosine														+					
α-amino-N-valeric acid																-			
formamide																	+		
L-isoleucine				+															
L-leucine				+															

¹Differences in respiration between WT and c3-null derivative have been scored as follows: +++, wt OD₅₉₀ > 4 x c3-null OD₅₉₀; ++, wt OD₅₉₀ > 3 x c3-null OD₅₉₀; +, wt OD₅₉₀ > 2 x c3-null OD₅₉₀; ---, c3-null OD₅₉₀ > 4 x wt OD₅₉₀; --, c3-null OD₅₉₀ > 3 x wt OD₅₉₀; -, c3-null OD₅₉₀ > 2 x wt OD₅₉₀.

²Phenotypes which are influenced by c3 in more than two species have been shaded.

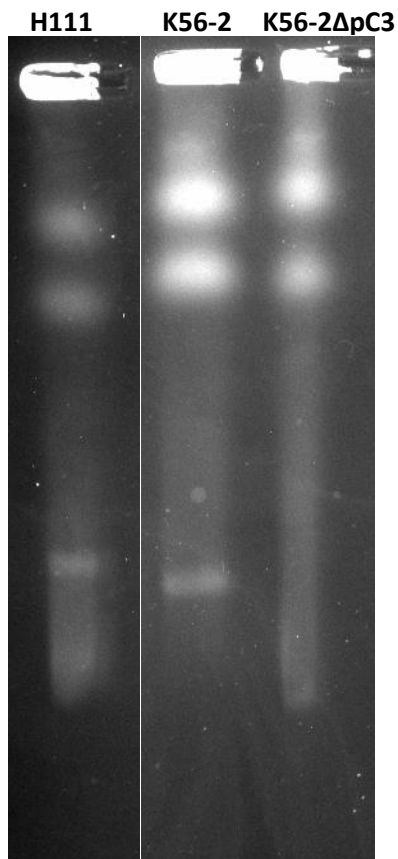


FIG S3 Visualisation of undigested genomic DNA from wild-type *B. cenocepacia* K56-2 and its pC3-null derivative. Genomic DNA was separated by pulsed-field gel electrophoresis. *B. cenocepacia* H111 was included as a standard (left-most lane), since the size of each replicon is known for this strain. Lanes between those showing H111 and K56-2 and its pC3-null counterpart have been deleted for clarity, but band positions have not been altered.

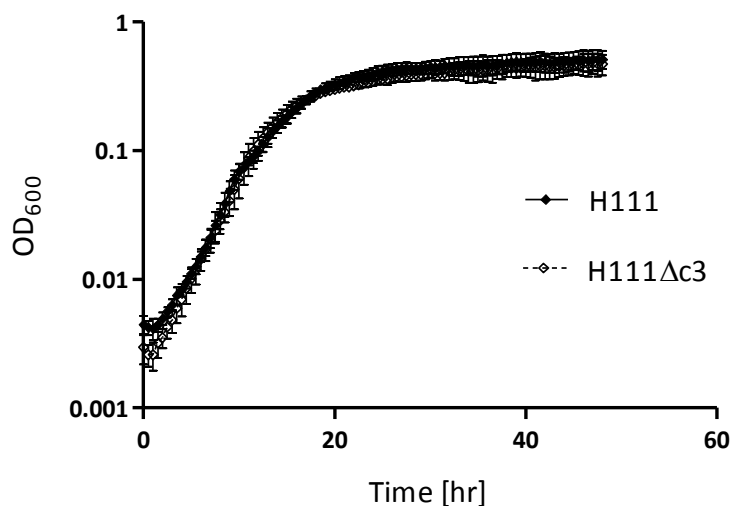


FIG S4 H111 and its pC3-null mutant grow equally well in minimal salts medium. Growth curves were carried out in M9 minimal salts broth at 37 °C, and OD₆₀₀ was read every 30 mins. Average growth rates were as follows: H111, 0.47 doublings h⁻¹; H111Δc3, 0.51 doublings h⁻¹. Average saturation OD₆₀₀ H111, 0.49; H111Δc3, 0.45.

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