

Table S3. *M. abscessus* survival following phage challenge

Strain	M <sup>1</sup>	Phage challenge <sup>2</sup>	# of Survivors <sup>3</sup>	Total tested <sup>4</sup>	FR <sup>5</sup>	PR <sup>6</sup>
GD01	R	BPsΔ33HTH_HRM10 + Muddy + ZoeJΔ45	6	6	6;0;6	0;5;0
GD17	R	BPsΔ33HTH_HRM <sup>GD03</sup>	<10	4	0	1
GD19	R	Muddy	<10	6	2*	1*
GD20	R	BPsΔ33HTH_HRM10	<10	4	0	0
GD22	R	BPsΔ33HTH_HRM10	<30	4	4	0
		BPsΔ33HTH_HRM <sup>GD03</sup>	<30	2	0	2
		Itos	lawn	-	-	-
		BPsΔ33HTH_HRM10 + Itos	<40	3	2;0	1;3
		BPsΔ33HTH_HRM <sup>GD03</sup> + Itos	<40	4	1;1	3;0
GD24	R	BPsΔ33HTH_HRM10	<40	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup>	<10	3	0	0
GD25	R	Muddy	<10	3	1	0
GD26	R	BPsΔ33HTH_HRM10	>160	8	1	1
		BPsΔ33HTH_HRM <sup>GD03</sup>	>200	4	0	0
GD27	R	BPsΔ33HTH_HRM10	0	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup>	0	-	-	-
		Itos	lawn	-	-	-
		BPsΔ33HTH_HRM10 + Itos	0	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup> + Itos	0	-	-	-
GD30	R	Muddy	lawn	-	-	-
GD35	R	BPsΔ33HTH_HRM10	<10	4	1	0
		BPsΔ33HTH_HRM <sup>GD03</sup>	<10	4-DNG	-	0
GD38	R	BPsΔ33HTH_HRM10	<10	3	3	0
		BPsΔ33HTH_HRM <sup>GD03</sup>	<10	1	1	0
		FionnbharthΔ45Δ47	lawn	-	-	-
GD40	R	BPsΔ33HTH_HRM10	<20	4-DNG	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup>	<20	4	0	4
		D29	lawn	-	-	-
GD41	R	BPsΔ33HTH_HRM10	<10	4	3	0
		BPsΔ33HTH_HRM <sup>GD03</sup>	<10	4	2	0
		Itos	lawn	-	-	-
		BPsΔ33HTH_HRM10 + Itos	<10	4-DNG	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup> + Itos	<10	4	4;2	0;0
GD43B	R	BPsΔ33HTH_HRM <sup>GD03</sup>	0	-	-	-
GD45	R	Muddy	0	-	-	-
GD51	R	Muddy	0	-	-	-
GD52	R	BPsΔ33HTH_HRM <sup>GD03</sup>	<20	4-DNG	-	-
		Itos	lawn	-	-	-
		FionnbharthΔ45Δ47	<20	4-DNG	-	-
GD54	R	BPsΔ33HTH_HRM <sup>GD03</sup>	?	-	-	-
		Muddy	<10	4	0	0
		BPsΔ33HTH_HRM <sup>GD03</sup> + Muddy	<10	0	-	-
GD57	R	BPsΔ33HTH_HRM <sup>GD03</sup>	<10	4	2	2
		Itos	lawn	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup> + Itos	<10	2	1;0	0;1
GD59	R	BPsΔ33HTH_HRM <sup>GD03</sup>	<20	3	3	0
		BPsΔ33HTH_HRM10	>20	4	4	0
		Itos	lawn	4	4	0
		BPsΔ33HTH_HRM <sup>GD03</sup> + Itos	<20	3	3;0	0;0
		BPsΔ33HTH_HRM10 + Itos	<20	4	4;0	0;0
GD68A	R	Muddy	<10	4	0	0
GD79	R	BPsΔ33HTH_HRM <sup>GD03</sup>	0	-	-	-
		Muddy	0	-	-	-
		ZoeJΔ45	0	-	-	-
GD82	R	Muddy	<10	4	1	0

		BPsΔ33HTH_HRM10	<10	NT	-	-
		ZoeJΔ45	<1000	4	1	0
GD89	R	BPsΔ33HTH_HRM10 + Muddy + ZoeJΔ45	<50	4	0;0;4	0;0;0
		D29_HRM <sup>GD40</sup>	<10	4	1	0
GD100B	R	BPsΔ33HTH_HRM10 + D29_HRM <sup>GD40</sup>	<10	2	0;0	0;0
		Itos	lawn	-	-	-
		Faith1Δ38-40	lawn	-	-	-
GD102	R	BPsΔ33HTH_HRM10	<30	IP	-	-
GD111	R	Muddy	<10	4	0	1
GD16	S	Muddy_HRM <sup>GD04</sup>	<5	IP	-	-
GD21	S	BPsΔ33HTH_HRM <sup>GD03</sup>	lawn	-	-	-
GD33	S	BPsΔ33HTH_HRM10	lawn	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup>	lawn	-	-	-
		BPsΔ33HTH_HRM10	lawn	-	-	-
		BPsΔ33HTH_HRM <sup>GD03</sup>	lawn	-	-	-
GD34	S	Itos	lawn	-	-	-
GD58	S	Faith1Δ38-40	lawn	-	-	-
GD64	S	Muddy	lawn	-	-	-
GD75	S	Faith1Δ38-40	lawn	-	-	-
		BPsΔ33HTH_HRM10	lawn	-	-	-
		Faith1Δ38-40	lawn	-	-	-
		D29_HRM <sup>GD40</sup>	lawn	-	-	-
GD81	S	Itos	lawn	-	-	-
		Faith1Δ38-40	lawn	-	-	-
GD84	S	Itos	lawn	-	-	-
		Muddy	lawn	-	-	-
GD108	S	Itos	lawn	-	-	-
		Itos + Faith1Δ38-40	lawn	-	-	-

<sup>1</sup>Morphology of clinical isolate (R-rough; S-smooth).

<sup>2</sup>Phage(s) incubated with *M. abscessus* cells in assay.

<sup>3</sup>Number of survivors in assay.

<sup>4</sup>Total number of survivors screened for phage susceptibility. DNG; surviving colony did not grow in order to test resistance. NT: Not Tested.

<sup>5</sup>The number(s) of surviving colonies with full resistance (FR) to the phage it was challenged with are indicated. If more than one phage was used for selection, the numbers of mutants fully resistant to each of the individual phages are shown, separated by semicolons and ordered as shown to their left. Asterisk indicates a change of morphology from R to S.

<sup>6</sup>The number(s) of surviving colonies partially resistance (PR) to the phage it was challenged with are indicated. If more than one phage was used for selection, the numbers of mutants partially resistant to each of the individual phages are shown, separated by semicolons and ordered as shown to their left.