

Supplementary Figure S2: Growth scores for constructs

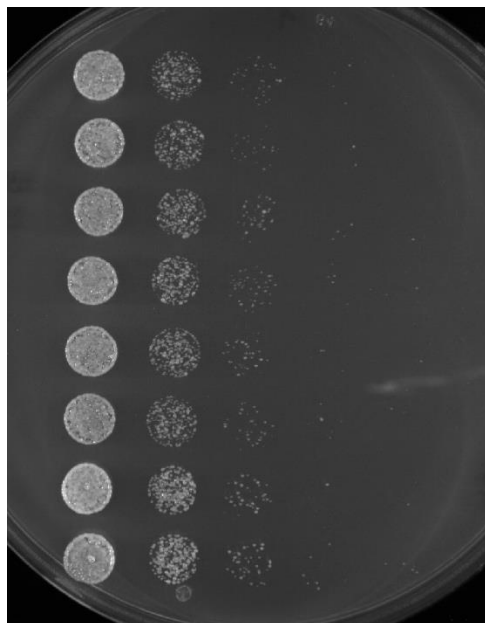
Unless noted otherwise, the following images show YPDA plates that were incubated for ca. 1 day at 30 °C. All strains carried the indicated Abf1 constructs on pRS315, while the chromosomal *ABF1* gene was deleted. If one of the three independent clones after transformation for each construct did not show the same growth rate as the others, it is labeled as „outlier“ and we categorized the growth rate according to the two similarly growing clones. All rating is relative to the growth of the strain with wild type (WT) Abf1 on the same plate.

growth
rate score

+++++

+++++

+++++



FUS¹⁻¹⁶³12E + GR

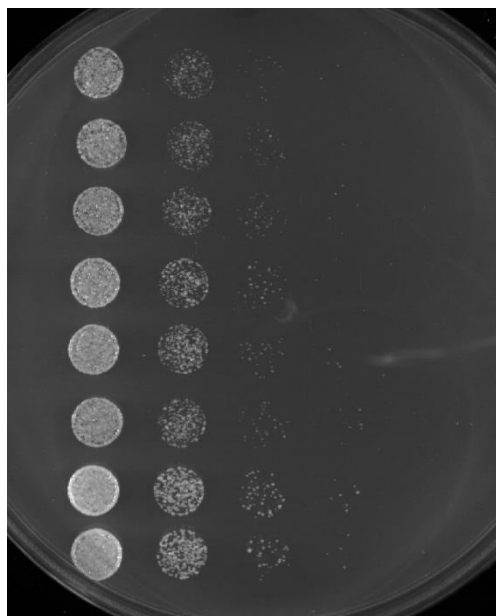
FUS¹⁻¹⁶³12E + Gal4^{M2}

Abf1 WT

+++++

+++++

+++++



FUS¹⁻¹⁶³12E + VP16

FUS¹⁻¹⁶³12E + Gcn4

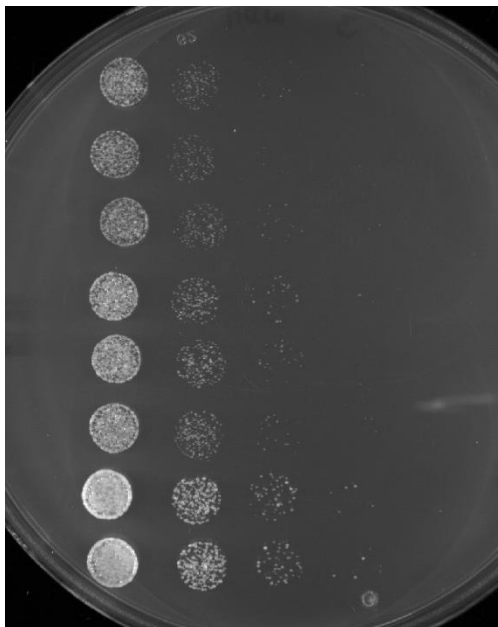
Abf1 WT

growth
rate score

++

+++

++++



Abf1 IDR1⁸⁷⁻³¹¹ + Gal4^{G4}

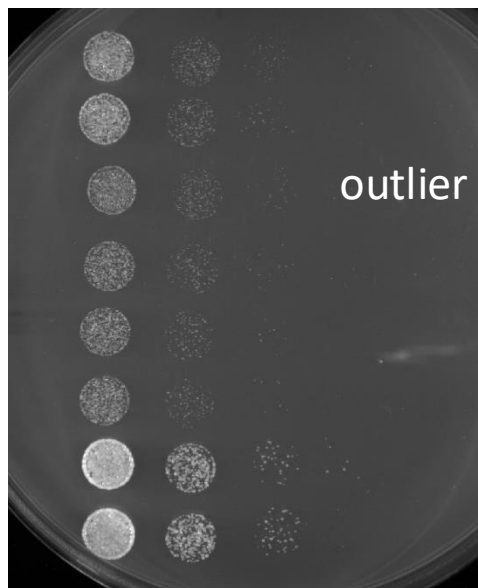
Rap1²³¹⁻³⁶¹ + Gal4^{G4}

Abf1 WT

+++

++

++++



LS-8

Sup35¹⁻¹³¹ + Gal4^{G4}

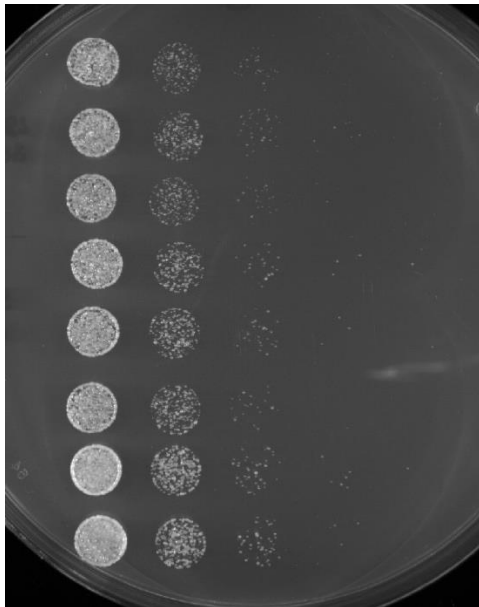
Abf1 WT

growth
rate score

++++

++++

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FUS¹⁻¹⁶³12E + Gal4^{G4} distr.

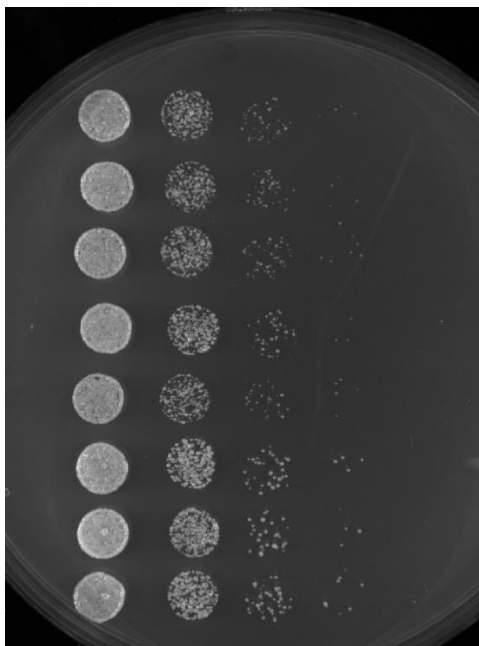
T. phaffii

Abf1 WT

++++

++++

++++



LS-2

LS-3

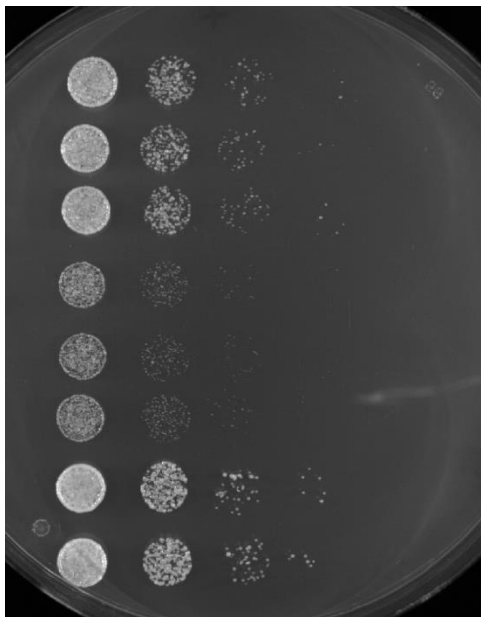
Abf1 WT

growth
rate score

+++++

++

+++++



LS-9

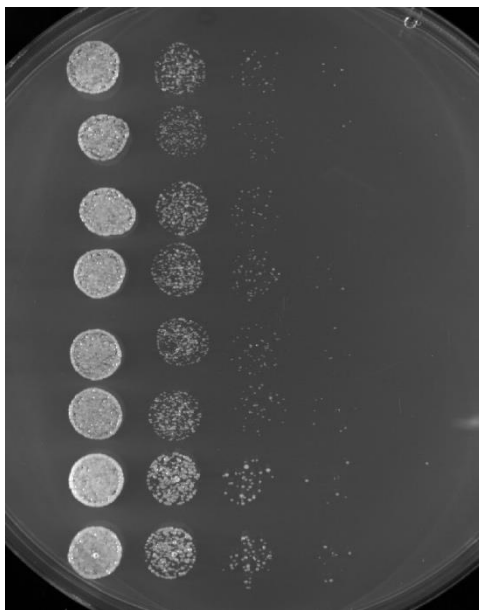
LS-13

Abf1 WT

+++++

+++++

+++++



LS-14

Reb1¹⁻¹²⁰ (PKEEEEGGL)

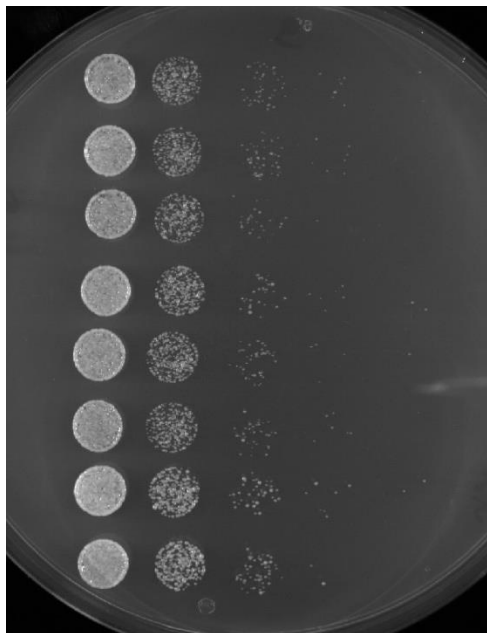
Abf1 WT

growth
rate score

+++++

+++++

+++++



S. kudriavzevii

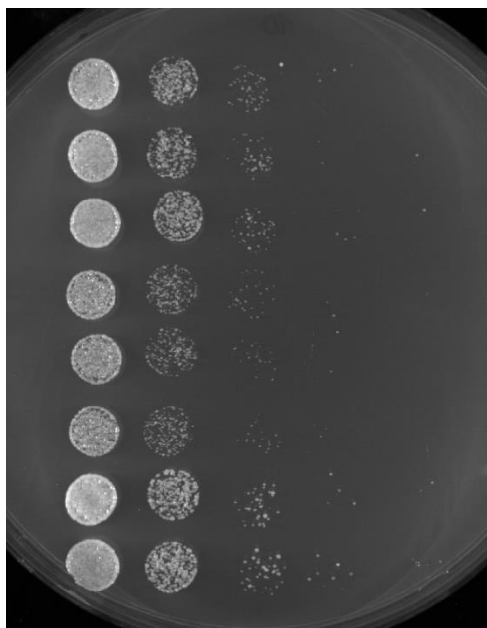
S. mikatae

Abf1 WT

+++++

+++

+++++



S. uvarum

T. delbrueckii

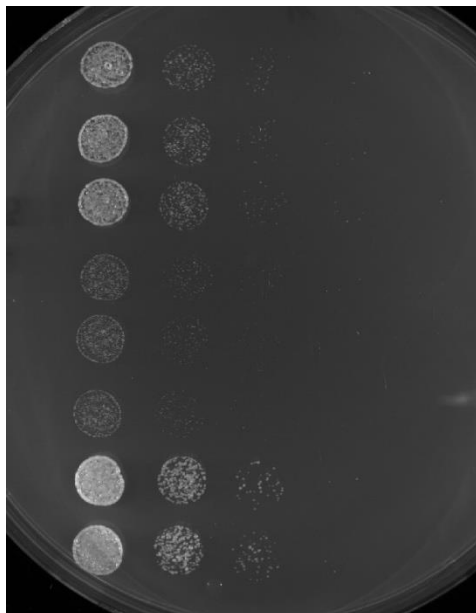
Abf1 WT

growth
rate score

+++

++

++++



FUS¹⁻¹⁶³12E + p65

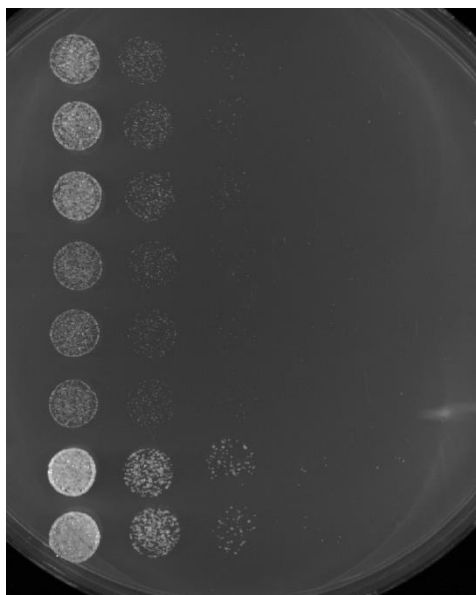
FUS¹⁻¹⁶³12E + Gal4^{G4}
aromatic clusters

Abf1 WT

+++

++

++++



FUS¹⁻¹⁶³12E + p65 distr.

Sup35¹⁻¹³¹ + p65

Abf1 WT

growth
rate score

+++

+++++

outlier

Reb1¹⁻⁴²⁰

Abf1 WT

+++++

+++++

+++++

LS-1

LS-10

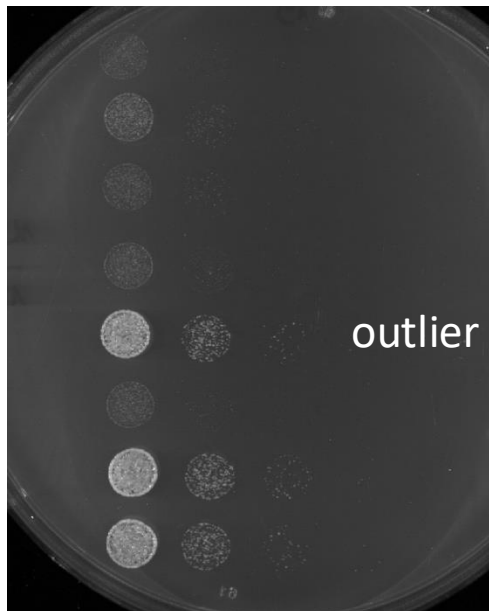
Abf1 WT

growth
rate score

++

++

++++



K. lactis full length

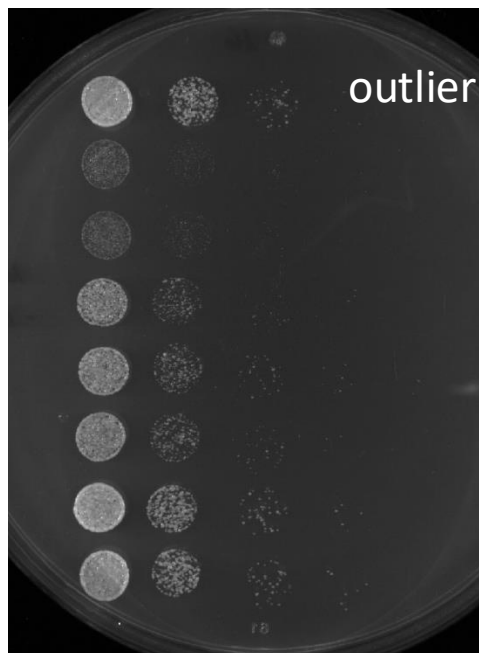
LS-7

Abf1 WT

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Δ IDR1 & IDR2⁴⁴⁹⁻⁶²³

Gal4⁷⁶⁸⁻⁸⁸¹

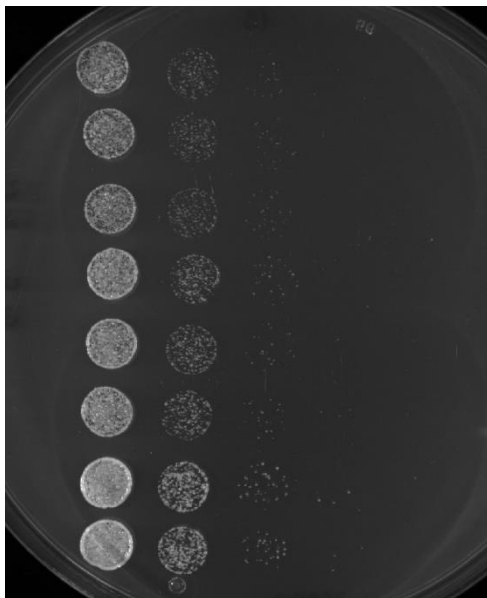
Abf1 WT

growth
rate score

+++

+++

+++++



FUS¹⁻¹⁶³12E + Gal4^{G4}
context Δ E/D

FUS¹⁻¹⁶³12E + Gal4^{G4}
motif hydro distr.

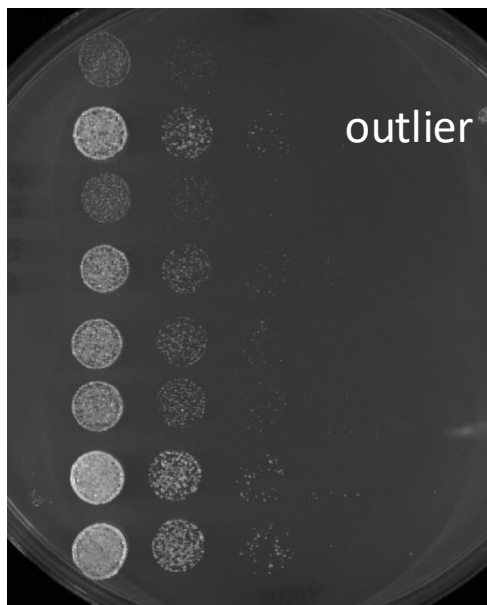
Abf1 WT

++

outlier

+++

+++++



FUS¹⁻¹⁶³12E + TDP-43

FUS¹⁻¹⁶³12E + Y/M

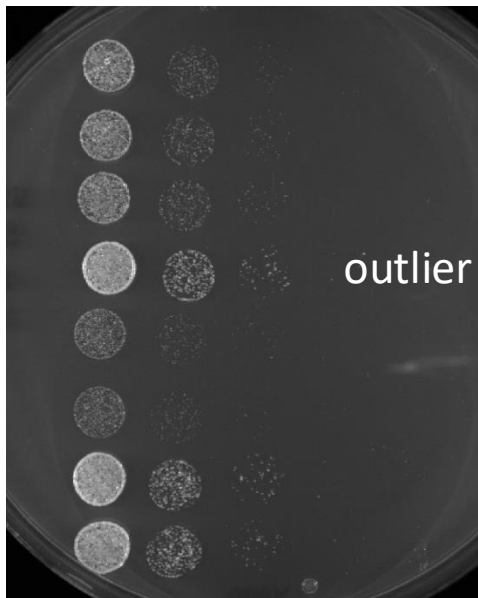
Abf1 WT

growth
rate score

+++

++

++++



FUS¹⁻¹⁶³12E + GR distr.

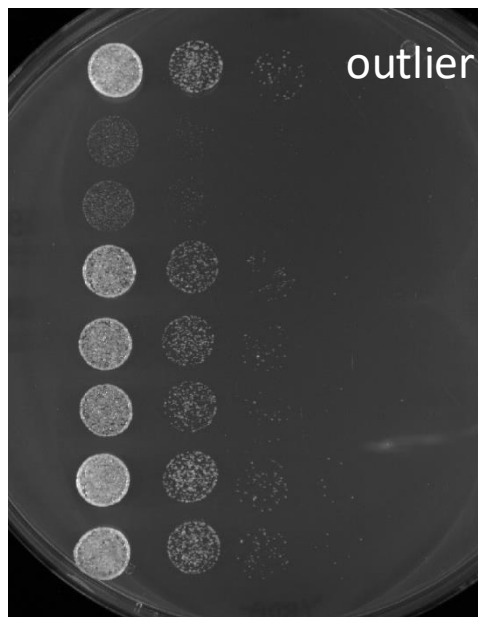
Sup35¹⁻¹³¹ + GR

Abf1 WT

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Sup35¹⁻¹³¹ + GR distr.

LS-6

Abf1 WT

growth
rate score

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+

++++

1 day

Pho4¹⁻²⁴⁹

LS-15

Abf1 WT

2 days

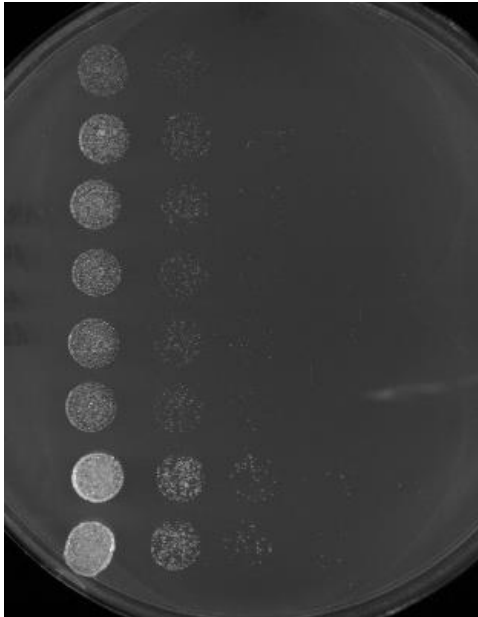
3 days

growth
rate score

+++

+++

++++



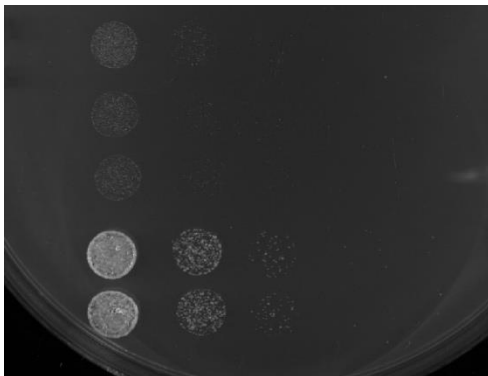
Altered valence 2

TDP-43 distr.

Abf1 WT

++

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FUS¹⁻¹⁶³12E + Abf1^{G4}

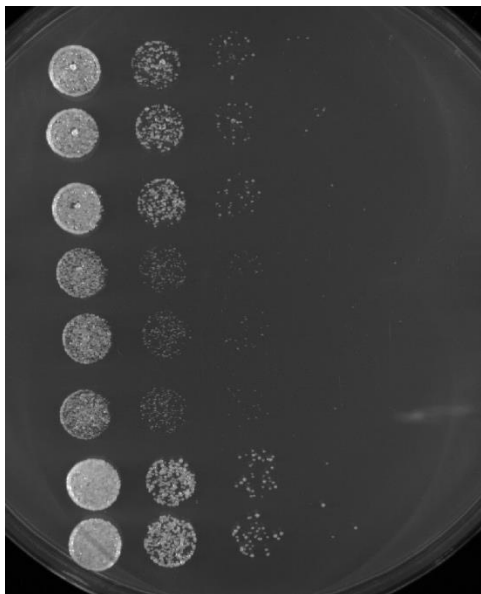
Abf1 WT

growth
rate score

++++

+++

++++



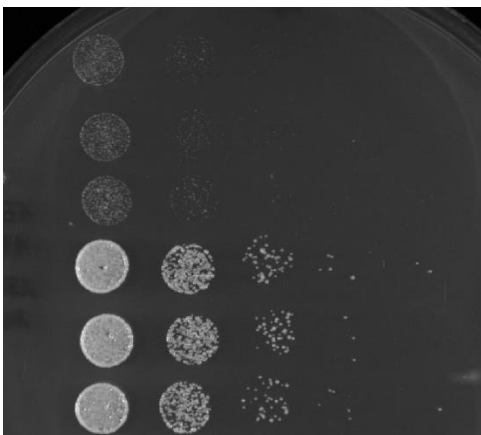
Gal4⁷⁶⁸⁻⁸⁸¹ shuffle 1

Gal4⁷⁶⁸⁻⁸⁸¹ shuffle 2

Abf1 WT

++

++++



Gal4⁷⁶⁸⁻⁸⁸¹ shuffle 3

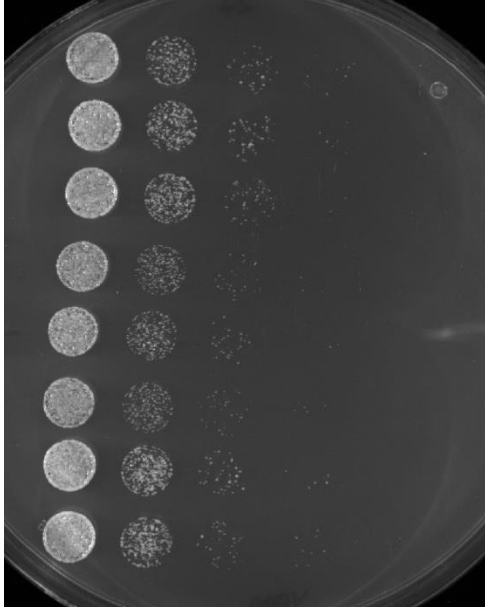
Abf1 WT

growth
rate score

++++

++++

++++



Δ IDR1

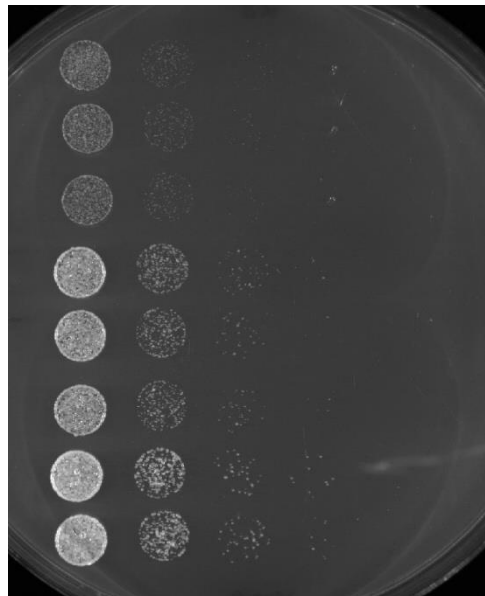
Δ IDR1 & IDR2⁴⁴⁹⁻⁶⁶²

Abf1 WT

+++

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++++



FUS¹⁻¹⁶³12E + Gal4^{G4}

Altered valence 1

Abf1 WT

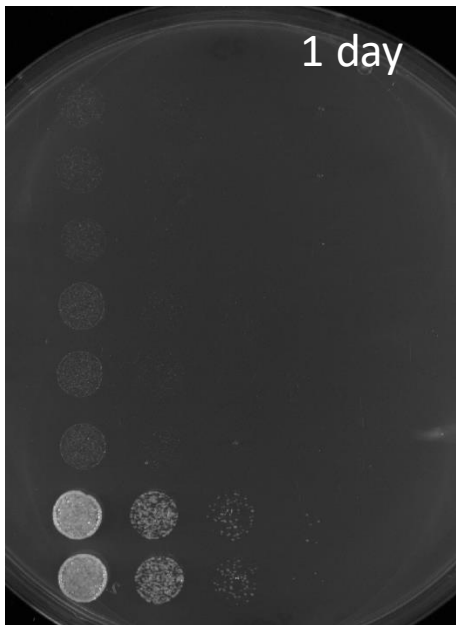
growth
rate score

1 day

+

+

++++

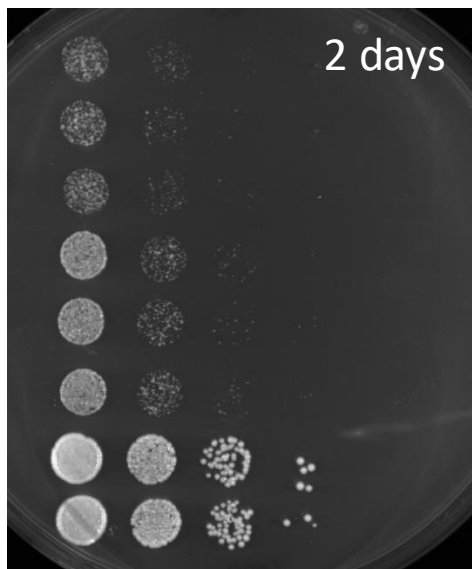


FUS¹⁻¹⁶³12E + Gal4^{G4}
all ΔE/D

NCS-506-Flag

Abf1 WT

2 days



FUS¹⁻¹⁶³12E + Gal4^{G4}
all ΔE/D

NCS-506-Flag

Abf1 WT

growth
rate score

++

+

++++

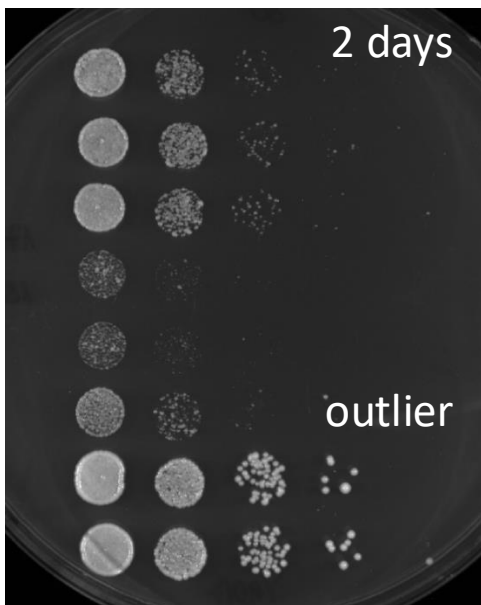


NCS-508

NCS-17

Abf1 WT

2 days



NCS-508

NCS-17

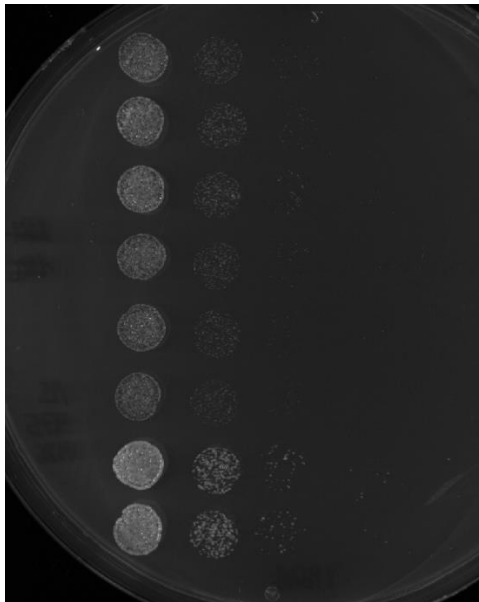
Abf1 WT

growth
rate score

+++

+++

++++



NCS-3

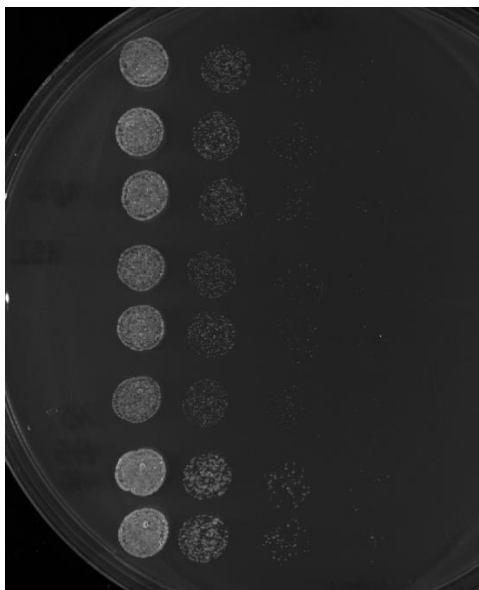
NCS-504

Abf1 WT

+++

+++

++++



NCS-1010

NCS-1502

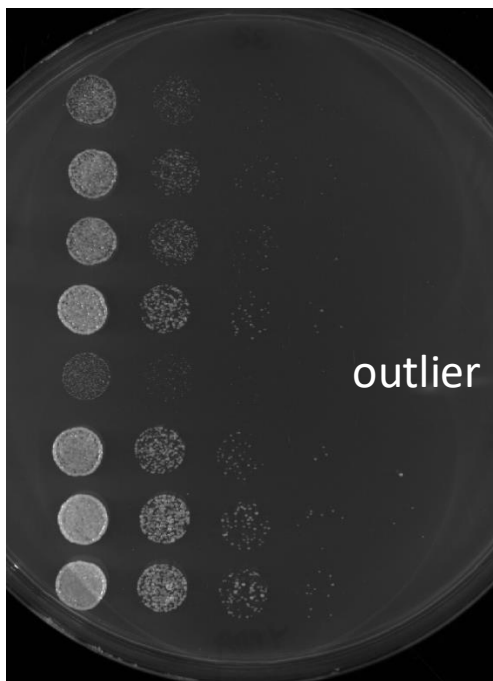
Abf1 WT

growth
rate score

+++

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++++



NCS-1508

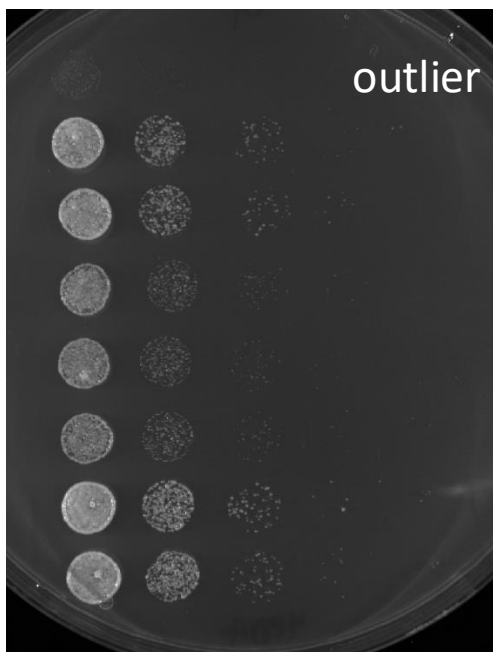
NCS-509

Abf1 WT

++++

+++

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NCS-510

NCS-21

Abf1 WT

growth
rate score

++

NCS-38

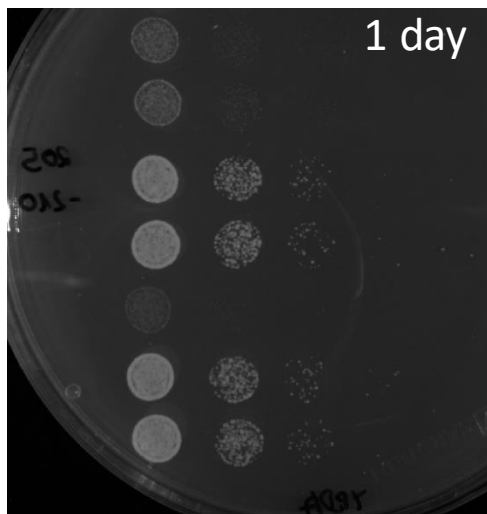
(not part of this study)

NCS-44

Abf1 WT

+

++++



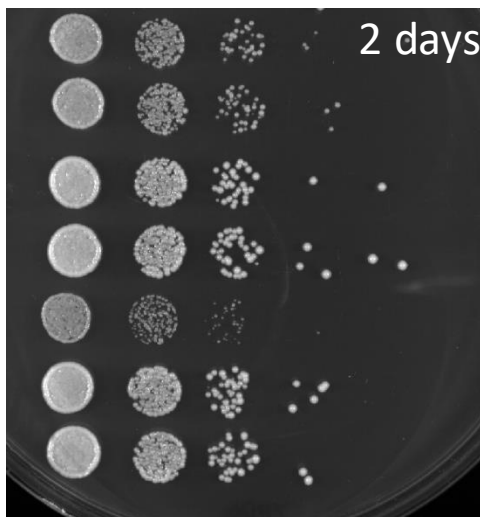
2 days

NCS-38

(not part of this study)

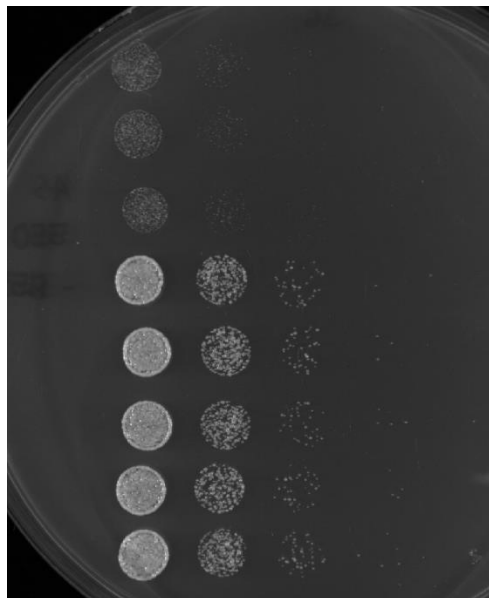
NCS-44

Abf1 WT



growth
rate score

++

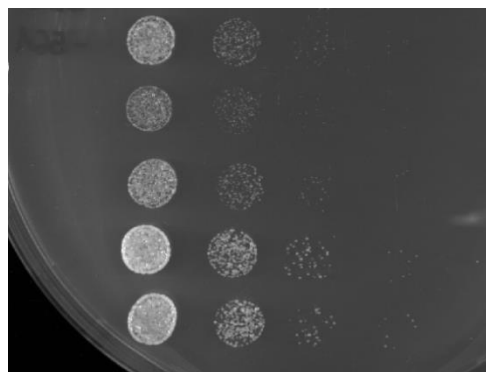


Sup35¹⁻¹³¹ + p65 distr.

(not part of this study)

Abf1 WT

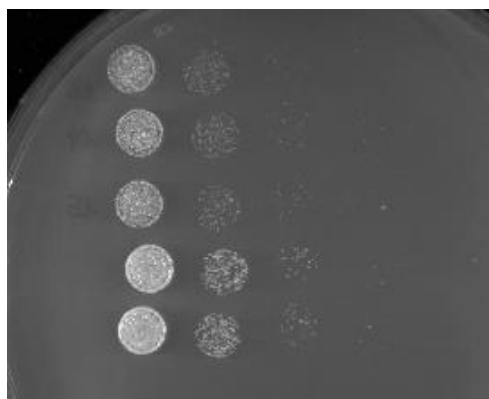
+++



FUS¹⁻¹⁶³12E + EM

Abf1 WT

+++



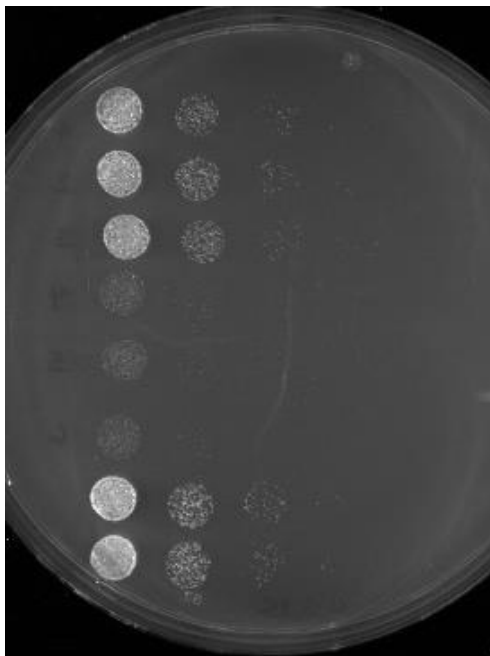
FUS¹⁻¹⁶³12E + Gal4^{G4} shuffle

Abf1 WT

growth
rate score

++

++++



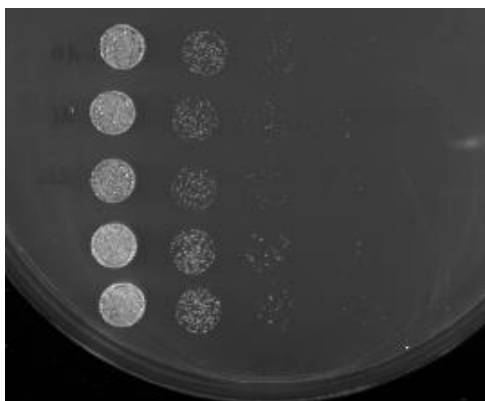
not part of this study

Sup35¹⁻¹³¹ + EM

Abf1 WT

++++

++++



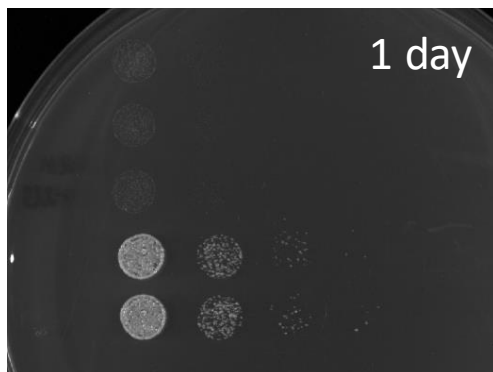
FUS¹⁻¹⁶³12E + Gal4^{G4} distr. II

Abf1 WT

growth
rate score

+

++++

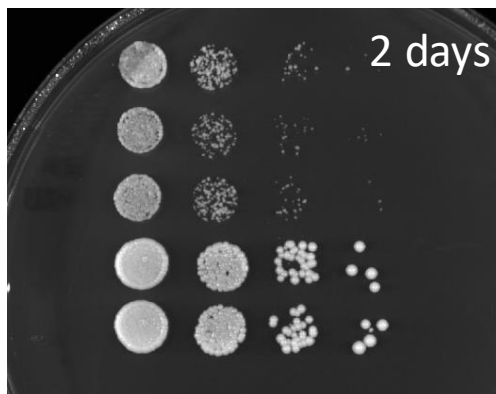


NCS-21 hydro→polar

Abf1 WT

+

++++



NCS-21 hydro→polar

Abf1 WT