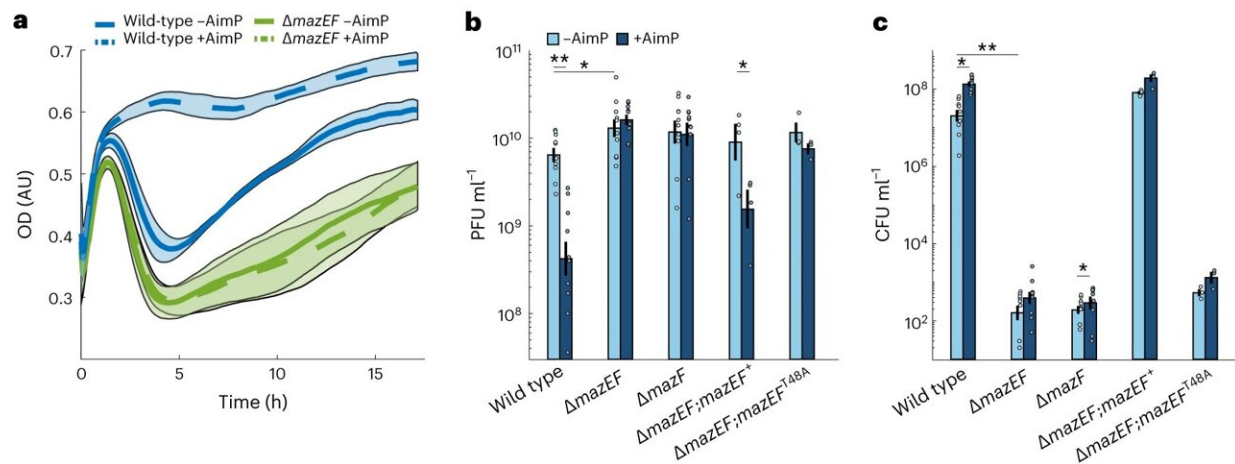


Deciphering how viruses choose to turn nasty or not to their bacterial host

March 13 2024



MazF strongly promotes $\phi 3T$ lysogenization. **a**, Growth curves of different strains infected by $\phi 3T$ at MOI of 0.1, either in the absence (solid line) or presence (dashed line) of the $\phi 3T$ arbitrium peptide (SAIRGA). The following strains were used: wild type (blue) and $\Delta mazEF$ (green). **b,c**, Free phage (**b**) and lysogen (**c**) numbers were measured for infection of various bacterial strains (denoted on the x axis) by a spectinomycin-marked $\phi 3T$ phage. **b**, PFU was measured 2 h after infection by plating on a $\Delta mazEF$ indicator strain. **c**, Lysogen numbers were enumerated 2 h after infection by measuring colony-forming units per milliliter on spectinomycin plates (for CFU levels after 20 min, see Extended Data Fig. 2j). Line and shaded regions mark the mean and standard error between three biological repeats of the growth curves in **a**. Mean and error bars in **b** and **c** mark logarithmic mean and standard error based on either four or ten biological repeats on different days. Ten biological repeats were done to statistically resolve small differences. Asterisks mark statistical significance ($*P$

Citation: Deciphering how viruses choose to turn nasty or not to their bacterial host (2024, March 13) retrieved 27 April 2024 from <https://phys.org/news/2024-03-deciphering-viruses-nasty-bacterial-host.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.