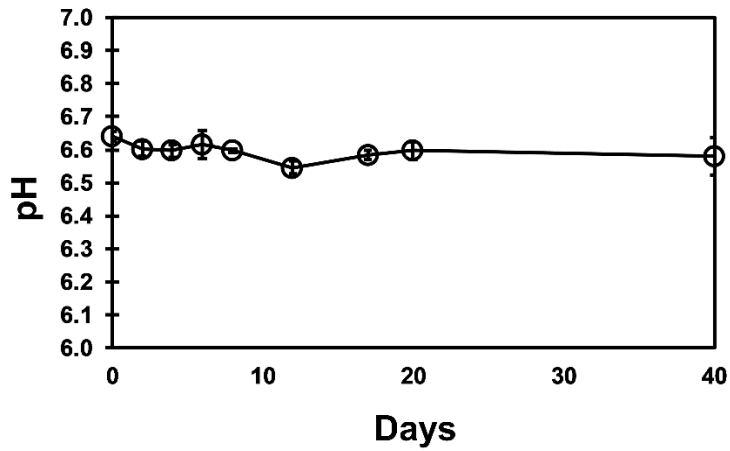


1 **Supplemental Materials**

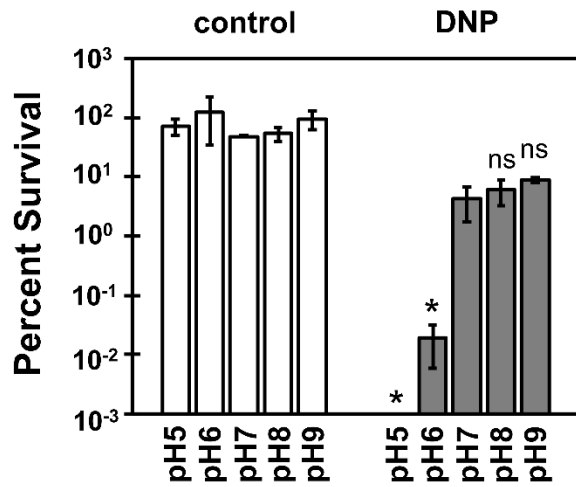
2 **Figure S1**



3

4 **Figure S1. Culture pH did not fluctuate during culture in the RAD model.** *Mtb* H37Rv was  
5 cultured in the RAD model for 40 days in DTA broth. At indicated time points cultures were  
6 sacrificially opened in an anaerobic chamber and the culture pH was measured using a Seven  
7 Easy™ pH Meter S20 (Metler Toledo). Time points represent average and standard deviations  
8 of pH measurements for three biological replicate cultures.

9 **Figure S2.**



10

11 **Figure S2. Nutrient-starved *Mtb* populations had increased susceptibility to collapse in**

12 **PMF under acidic conditions.** *Mtb* H37Rv grown to mid-log phase were washed and

13 resuspended in PBS plus 0.02% tyloxapol at pH 5.0, 6.0, 7.0, 8.0 or 9.0 and treated for 8 days

14 with 1 mM DNP. The graph depicts percent relative survival of DMSO vehicle mock-treated

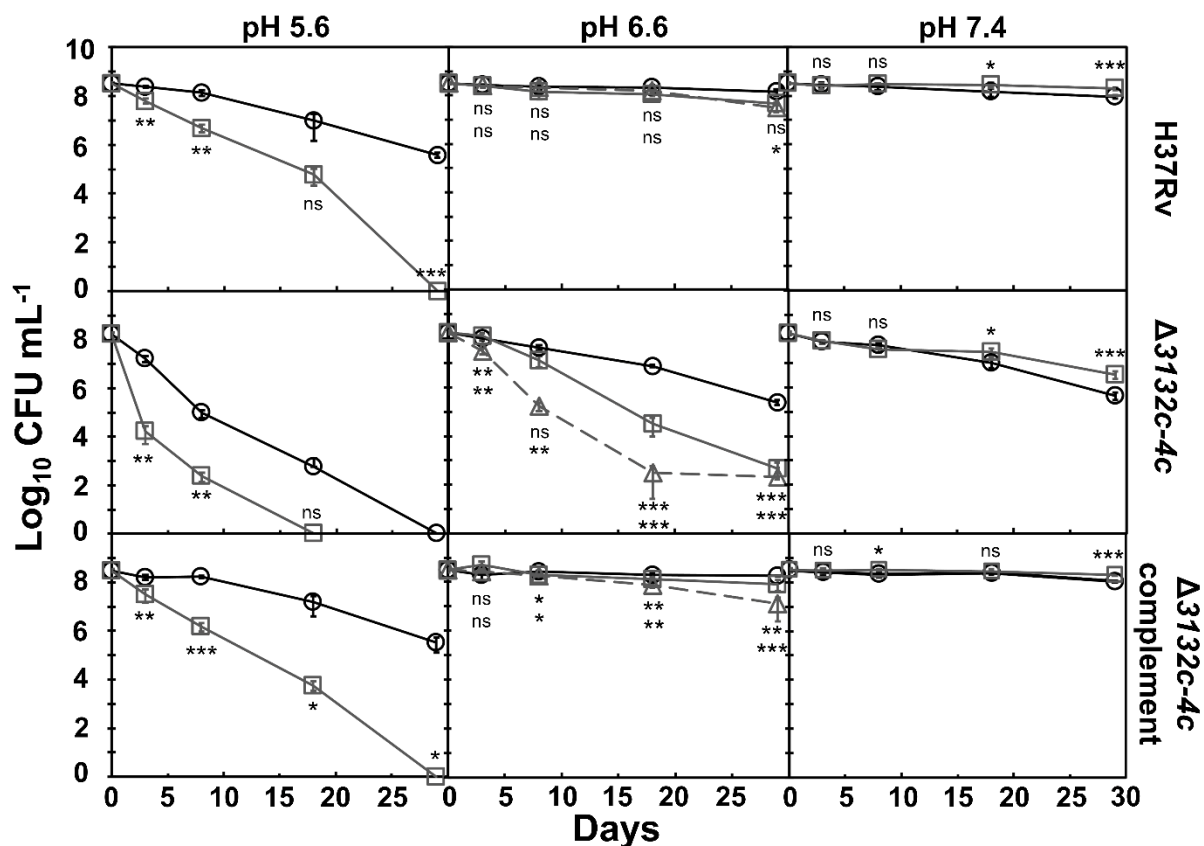
15 controls (white bars) versus 1 mM DNP treated cultures (grey bars). Data represent standard

16 deviation of triplicate biological cultures. Statistical significance indicates survival of DNP-treated

17 cultures at pH 5, 6, 8 and 9 versus pH 7 (\* for  $p \leq 0.05$ ; ns = not significant).

18

19 Figure S3.



20  
 21 **Figure S3. The DosR regulon mutant was hypersensitive to collapse in PMF under acidic**  
 22 **conditions.** The long-term survival is shown for *Mtb* H37Rv, H37Rv  $\Delta Rv3132c-4c::hyg$  ( $\Delta 3132-$   
 23  $4c$ ) and H37Rv  $\Delta Rv3132c-4c::hyg/pMV306::Rv3132c-4c$  ( $\Delta 3132-4c$  complement) cultured to  
 24 day 12 in the RAD model, treated with 1 or 2 mM 2,4-dinitrophenol (DNP), and monitored for 29  
 25 days. In each panel, DMSO-treated control cultures are depicted with black circles and lines, 1  
 26 mM DNP-treated cultures are depicted with dark grey squares and lines and 2 mM DNP-treated  
 27 cultures are depicted with grey triangles and dashed lines. Data represent triplicate biological  
 28 cultures. Statistics depict significance for survival DNP-treated cultures *versus* control cultures  
 29 at the same pH that were significantly worse than control cultures at pH 5.6 and 6.6 and  
 30 significantly better than control cultures at pH 7.4. In the middle panel asterisks on the top  
 31 indicate significance for 1 mM DNP-treated cultures *versus* control cultures, asterisks on the

32 bottom indicate significance for 2 mM DNP-treated cultures *versus* control cultures (\* for  $p \leq$   
33 0.05; \*\* for  $p \leq 0.01$ , \*\*\* for  $p = 0.001$ , ns = not significant).