**Supplementary Table S1.** Intracellular growth of wild-type and mutants in RAW 246.7 macrophages

Strain	No. of c.f.u. (ml macrophage lysate) <sup>-1</sup> *				
	1 h	4 days			
Wild-type (MAC 104)	$1.6\pm0.4\times10^{5}$	5.2±0.5×10 <sup>5</sup>			
STM1	1.7±0.3×10 <sup>5</sup>	$8.3\pm0.3\times10^{4}$ †			
STM2	$3.2\pm0.4\times10^{5}$	$7.0\pm0.4\times10^{4}$ †			
STM3	$5.0\pm0.7\times10^{5}$	1.6±0.5×10 <sup>5</sup>			
STM4	$2.3\pm0.3\times10^{5}$	1.9±0.6×10 <sup>5</sup>			
STM5	$3.8\pm0.5\times10^{5}$	$2.6\pm0.4\times10^{4}$ †			
STM6	$2.1\pm0.7\times10^{5}$	$7.4\pm0.5\times10^{4}$ †			
STM8	$4.7\pm0.3\times10^{5}$	$6.1\pm0.5\times10^{4}$ †			
STM10	$2.5\pm0.6\times10^{5}$	1.1±0.3×10 <sup>4</sup> †			
STM11	$3.0\pm0.3\times10^{5}$	$2.4\pm0.6\times10^{3}$ †			

<sup>\*</sup>Macrophage monolayers were infected for 1 h, washed and intracellular bacteria allowed to grow for 4 days.

Monolayers were lysed and processed as described in Methods. The experiment was repeated three times.

**Supplementary Table S2.** Susceptibility of wild-type *M. avium* and STM mutants to exposure to NO *in vitro* 

110 111 11110					
Strain		No. of c.f.u.			
		NOR-3 concentration*			
	Inoculum	0 μΜ	0.1 μΜ	1 μΜ	
Wild-type (MAC 104)	1×10 <sup>5</sup>	$9.8\pm0.3\times10^{4}$	$9.3\pm0.4\times10^{4}$	$9.1\pm0.3\times10^{4}$	
STM1	$1.5 \times 10^5$	$9.9\pm0.3\times10^{4}$	$8.3\pm0.3\times10^4$	$8.2\pm0.2\times10^{4}$	
STM5	$1.9 \times 10^{5}$	$9.8\pm0.6\times10^{4}$	$7.8\pm0.5\times10^{4}$	$5.6\pm0.3\times10^{4}$ †	
STM10	1.2×10 <sup>5</sup>	$9.6\pm0.4\times10^{4}$	$6.1\pm0.2\times10^{4}$ †	$5.8\pm0.4\times10^{3}$ †	
STM11	$1.4 \times 10^{5}$	$9.7 \pm 0.6 \times 10^4$	$9.3\pm0.4\times10^{4}$	$3.5\pm0.3\times10^{4}$ †	

<sup>\*</sup>Bacteria were incubated with NOR-3, pH 7.4, at 37 °C for 60 min. Viability was then determined by plating.

 $<sup>\</sup>dagger P$ <0.05 compared with control (wild-type MAC 104) at 4 days after infection.

 $<sup>\</sup>dagger P$ <0.01 compared to the control WT MAC 104.

**Li, Y., Danelishvili, L., Wagner, D., Petrofsky, M. & Bermudez, L. E. (2010).** Identification of virulence determinants of *Mycobacterium avium* that impact on the ability to resist host killing mechanisms. *Journal Med Microbiol* **59**, 8–16.