

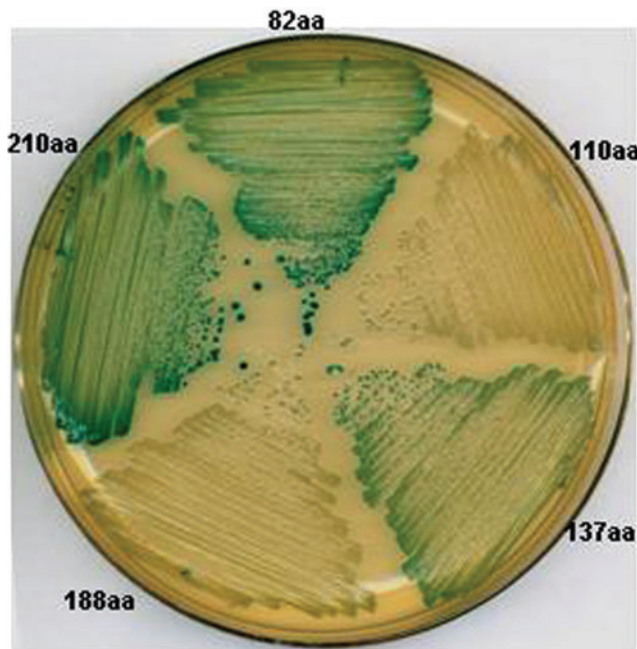
Supplementary Data

SUPPLEMENTARY TABLE S1. STRAINS AND PLASMID USED IN THIS RESEARCH

<i>Strains or plasmid</i>	<i>Relevant genotype and features</i>	<i>Source</i>
Plasmids		
pDHB5747	Amp ^r pBR-based vector with phoA gene (pGA4ΔBsp)	(1)
pXW41	Based on pDHB5747, with His-VKOR-AP fusion 210	This study
pXW58	Based on pDHB5747, with His-VKOR-AP fusion 188	This study
pXW43	Based on pDHB5747, with His-VKOR-AP fusion 137	This study
pXW56	Based on pDHB5747, with His-VKOR-AP fusion 110	This study
pXW52	Based on pDHB5747, with His-VKOR-AP fusion 82	This study
pXW80	Based on pDHB5747, with VKOR-AP fusion 210	This study
pXW73	Based on pDHB5747, with VKOR-AP fusion 188	This study
pXW74	Based on pDHB5747, with VKOR-AP fusion 137	This study
pXW90	Based on pDHB5747, with VKOR-AP fusion 110	This study
pXW82	Based on pDHB5747, with VKOR-AP fusion 82	This study
pTrc99a	Empty vector	(2)
pRD33	pTrc99a with wild-type VKOR	This study
pXW131	pTrc99a with VKOR-C139A, C142A	This study
pXW135	pTrc99a with VKOR-C139A	This study
pXW138	pTrc99a with VKOR-C57A	This study
pXW139	pTrc99a with VKOR-C65A	This study
pXW140	pTrc99a with VKOR-C57A, C65A	This study
pXW141	pTrc99a with VKOR-C142A	This study
pXY115	pTetG with VKOR-C57A	This study
pXY116	pTetG with VKOR-C65A	This study
pXY117	pTetG with VKOR-C57A, C65A	This study
pXY118	pTetG with VKOR-C139A	This study
pXY119	pTetG with VKOR-C142A	This study
pXY120	pTetG with VKOR-C139A, C142A	This study
pXY121	pTetG with VKOR-wild type	(3)
Strains		
DHB250	pACYClacIq-CAM / DHB4 pcnB80:Tn10	Laboratory collection
FA113	DHB4 gor522... mini-Tn10Tc trxB::Km supp	Laboratory collection
XW106	FA113 λInch1 pXW 41 Δ(latt-lom)::bla	This study
XW107	FA113 λInch1 pXW 58 Δ(latt-lom)::bla	This study
XW108	FA113 λInch1 pXW 43 Δ(latt-lom)::bla	This study
XW109	FA113 λInch1 pXW 56 Δ(latt-lom)::bla	This study
XW110	FA113 λInch1 pXW 52 Δ(latt-lom)::bla	This study
HK320	F-Δara-714 galU galK D(lac)X74 rpsL thi ΔdsbB	Laboratory collection
HK329	F-Δara-714 galU galK D(lac)X74 rpsL thi ΔdsbAΔdsbB	Laboratory collection

SUPPLEMENTARY TABLE S2. PRIMERS USED IN THIS WORK

Name	Sequence (5' to 3')
5' primer for all five fusions	CAGACGCGTATGGTTGCAGCGCGACCT
F210 3' primer	CGATCCGGACCGATCAGCGTCGACCAATAGTCCC
F188 3' primer	CAGTCCGGACCCCGTGGCCAGCGACCATCG
F137 3' primer	TGATCCGGACCCGGACCGATACGGTACAGGC
F110 3' primer	GACTCCGGACCCCAATACCACCTGGGCAACG
F82 3' primer	CAGTCCGGACCCGGTGGGAAAGCCCAGCAAC
Oligos of SD-his-for	CGCGACACAGGAAACAGACCatgGGCAGCAGCCATCATCATCA TCATCACT
Oligos of SD-his-rev	cgcgagtGATGATGATGATGATGGCTGCTGCCcatGGTCTGTTTC CTGTGT
Oligos of SD-for	CGCGACACAGGAAAC
Oligos of SD-rev	CGCGGTTTCCTGTGT
Primer for pXW 131 (Top)	GTATCCGGTGCCCTGGCCCCATACGCCATGGTGGTCTG
Primer for pXW 131 (Bott)	CAGACCACCATGGCGTATGGGGCCAGGGCACCGATAC
Primer for pXW 135 (Top)	GTATCCGGTGCCCTGGCCCCATACTGCATGGTGGTCTG
Primer for pXW 135 (Bott)	CAGACCACCATGCAGTATGGGGCCAGGGCACCGATAC
Primer for pXW 138 (Top)	GATCTATGTGCCGTCAGCCAATGTCAACCCGATAGTG
Primer for pXW 138 (Bott)	CACTATCGGGTTGACATTGGCTGACGGCACATAGATC
Primer for pXW 139 (Top)	CCGATAGTGTCCGGCCGGCTCGGTGATGACCAC
Primer for pXW 139 (Bott)	GTGGTCATCACCGAGCCGGCCGACACTATCGG
Primer for pXW 141 (Top)	GTATCCGGTGCCCTGTGCCCATACGCCATGGTGGTCTG
Primer for pXW 141 (Bott)	CAGACCACCATGGCGTATGGGCACAGGGCACCGATAC



SUPPLEMENTARY FIG. S1. AP activity from the MtbVKOR-AP fusions on plate. These fusion strains were streaked out on media containing XP, a chromogenic substrate of AP.

References

1. Boyd D, Traxler B, and Beckwith J. *J Bacteriol* 175: 553–556, 1993.
2. Amann E, Ochs B, and Abel KJ. *Gene* 69: 301–315, 1998.
3. Dutton RJ, Wayman A, Wei JR, Rubin EJ, Beckwith J, Boyd D. *Proc Natl Acad Sci U S A* 107: 297–301, 2010.