

Table S1. Plasmids used in this study.

Name	Properties	Source
<i>E. coli</i>		
pDEST17	Gateway™ destination vector generating an N-terminal His ₆ tag	Invitrogen
pDEST17-ravN	<i>ravN</i> in pDEST17	This study
pDEST17-ravI	<i>ravI</i> in pDEST17	This study
pDEST17-ankJ	<i>ankJ</i> in pDEST17	This study
pDEST17-lpg2452	<i>lpg2452</i> in pDEST17	This study
pDEST17-lpg2452 ^{C57A}	pDEST17-lpg2452 with mutation C57A	This study
pDEST17-lpg2452 ^{H426A}	pDEST17-lpg2452 with mutation H426A	This study
pDEST17-lpg2452 ^{D428A}	pDEST17-lpg2452 with mutation D428A	This study
pGEX-6p-1	<i>E. coli</i> expression vector generating an N-terminal GST fusion	GE
pGEX-6p-1-ravN	<i>ravN</i> in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₀₀	<i>ravN</i> residues 1-100 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₄₀	<i>ravN</i> residues 1-140 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₀₁₋₂₁₂	<i>ravN</i> residues 101-212 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₄₁₋₂₁₂	<i>ravN</i> residues 141-212 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₁₀	<i>ravN</i> residues 1-110 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₂₀	<i>ravN</i> residues 1-120 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₂₃	<i>ravN</i> residues 1-123 in pGEX-6p-1	This study
pGEX-6p-1-ravN ₁₋₁₃₀	<i>ravN</i> residues 1-130 in pGEX-6p-1	This study
pGEX-6p-1-ravN ^{I8S}	pGEX-6p-1-ravN with mutation I8S	This study
pGEX-6p-1-ravN ^{L43S}	pGEX-6p-1-ravN with mutation L43S	This study
pGEX-6p-1-ravN ^{P47S}	pGEX-6p-1-ravN with mutation P47S	This study
pGEX-6p-1-ravN ^{L43S/P47S}	pGEX-6p-1-ravN with mutations L43S, P47S	This study
pGEX-6p-1-ravN ^{I8S/L43S/P47S}	pGEX-6p-1-ravN with mutations I8S, L43S, P47S	This study
pGEX-6p-1-ravN ^{L43S/P47S/K101A}	pGEX-6p-1-ravN with mutations L43S, P47S, K101A	This study
pGEX-6p-1-ravN ^{L43S/P47S/Q102A}	pGEX-6p-1-ravN with mutations L43S, P47S, Q102A	This study
pGEX-6p-1-ravN ^{L43S/P47S/F103A}	pGEX-6p-1-ravN with mutations L43S, P47S, F103A	This study
pGEX-6p-1-ravN ^{L43S/P47S/S104A}	pGEX-6p-1-ravN with mutations L43S, P47S, S104A	This study
pGEX-6p-1-ravN ^{L43S/P47S/D105A}	pGEX-6p-1-ravN with mutations L43S, P47S, D105A	This study
pGEX-6p-1-ravN ^{L43S/P47S/S106A}	pGEX-6p-1-ravN with mutations L43S, P47S, S106A	This study
pGEX-6p-1-ravN ^{L43S/P47S/V107A}	pGEX-6p-1-ravN with mutations L43S, P47S, V107A	This study
pGEX-6p-1-ravN ^{L43S/P47S/K108A}	pGEX-6p-1-ravN with mutations L43S, P47S, K108A	This study
pGEX-6p-1-ravN ^{L43S/P47S/R109A}	pGEX-6p-1-ravN with mutations L43S, P47S, R109A	This study
pGEX-6p-1-ravN ^{L43S/P47S/E110A}	pGEX-6p-1-ravN with mutations L43S, P47S, E110A	This study
pGEX-6p-1-ravN ^{F103A}	pGEX-6p-1-ravN with mutation F103A	This study
pGST-Parallel2-ravN	<i>ravN</i> in pGST-Parallel2	This study
pGST-Parallel2-ravN ₁₋₁₂₃	<i>ravN</i> residues 1-123 in pGST-Parallel2	This study
<i>S. cerevisiae</i>		
pYES2/NTA	<i>S. cerevisiae</i> expression vector containing the <i>URA3</i> gene and 2μ origin	Invitrogen
pYES2-ravN	<i>ravN</i> in pYES2/NTA	This study
pYES2-ravN ^{I8S}	pYES2-ravN with mutation I8S	This study
pYES2-ravN ^{L43S}	pYES2-ravN with mutation L43S	This study
pYES2-ravN ^{P47S}	pYES2-ravN with mutation P47S	This study
pYES2-ravN ^{L43S/P47S}	pYES2-ravN with mutations L43S, P47S	This study
pYES2-ravN ^{I8S/L43S/P47S}	pYES2-ravN with mutations I8S, L43S, P47S	This study
Mammalian cultured cells		
pRK5-HA-Ubiquitin	Mammalian expression of HA tagged ubiquitin	Addgene
pcDNA5/FRO/TO	Inducible expression vector used in Flp-In™ T-Rex™ host cell lines	Invitrogen
pcDNA5/FRO/TO-FLAG-ravN	<i>ravN</i> with a N-terminal single FLAG tag in pcDNA5/FRO/TO	This study
pcDNA5/FRO/TO-FLAG-ravN ^{I8S}	pcDNA5/FRO/TO-FLAG-ravN with mutation I8S	This study
pcDNA5/FRO/TO-FLAG-ravN ^{L43S/P47S}	pcDNA5/FRO/TO-FLAG-ravN with mutations L43S, P47S	This study
pcDNA5/FRO/TO-FLAG-ravN ^{I8S/L43S/P47S}	pcDNA5/FRO/TO-FLAG-ravN with mutations I8S, L43S, P47S	This study
pcDNA6.2-FLAG	pcDNA6.2-EmGFP with <i>emgfp</i> sequence replaced by a single FLAG tag sequence	This study
pcDNA6.2-FLAG-lpg2370	<i>lpg2370</i> in pcDNA6.2-FLAG	This study
pcDNA6.2-FLAG-lpg2452	<i>lpg2452</i> in pcDNA6.2-FLAG	This study
pcDNA6.2-FLAG-lpg2498	<i>lpg2498</i> in pcDNA6.2-FLAG	This study

pcDNA6.2-FLAG-lpg2577	<i>lpg2577</i> in pcDNA6.2-FLAG	This study
pcDNA6.2/N-EmGFP-DEST	Gateway destination vector generating an N-terminal EmGFP fusion	Invitrogen
pcDNA6.2/N-EmGFP-ravN	<i>ravN</i> in pcDNA6.2/N-EmGFP-DEST	This study
<i>Legionella</i>		
pSR47S	R6K suicide vector ($\text{Kan}^r \text{ sacB}$)	[1]
pSR47S- Δ ravN	pSR47S containing flanking regions of <i>ravN</i>	This study

1. Merriam JJ, Mathur R, Maxfield-Boumil R, Isberg RR. Analysis of the *Legionella pneumophila* fliI gene: intracellular growth of a defined mutant defective for flagellum biosynthesis. *Infection and Immunity*. 1997;65(6):2497-501.