

**Table S3.** Plasmids and bacterial strains used in this study

Strain/plasmid	Description	Source/reference
<i>E. coli</i> strains		
M15pREP4	Expression host containing pREP4; kanamycin resistant	Qiagen
XL1 Blue	General cloning strain and expression host. <i>lacI<sup>q</sup></i> ; tetracycline resistant	Stratagene
Plasmids		
pGEX6P-1	IPTG inducible expression vector. Introduces a GST tag at the N terminus of the expressed protein. Confers ampicillin resistance	GE Life Sciences
pGEXA4 pREP4	CheA <sub>4</sub> expression plasmid. pGEX6P-1 derivative Plasmid containing the <i>lacI<sup>q</sup></i> gene. Compatible with pQE30 and pQE60. Confers kanamycin resistance	[1] Qiagen
pQE30	IPTG inducible expression vector. Introduces RGS(H) <sub>6</sub> at the N terminus of the expressed protein. Confers ampicillin resistance	Qiagen
pQE60	IPTG inducible expression vector. Introduces RGS(H) <sub>6</sub> at the C terminus of the expressed protein. Confers ampicillin resistance	Qiagen
pQEA2	CheA <sub>2</sub> expression plasmid. pQE30 derivative	[2]
pQE60A3P1	CheA <sub>3</sub> P1 expression plasmid. pQE60 derivative	[1]
pQEY1	CheY <sub>1</sub> expression plasmid. pQE30 derivative	[2]
pQEY2	CheY <sub>2</sub> expression plasmid. pQE30 derivative	[2]
pQEY3	CheY <sub>3</sub> expression plasmid. pQE30 derivative	[2]
pQEY4	CheY <sub>4</sub> expression plasmid. pQE30 derivative	[2]
pQEY5	CheY <sub>5</sub> expression plasmid. pQE30 derivative	[3]
pQEY6	CheY <sub>6</sub> expression plasmid. pQE30 derivative	[4]
pQEB1	CheB <sub>1</sub> expression plasmid. pQE30 derivative	[5]
pQEB2	CheB <sub>2</sub> expression plasmid. pQE30 derivative	[4]

## References

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3. Porter SL, Armitage JP (2002) Phosphotransfer in *Rhodobacter sphaeroides* chemotaxis. *J Mol Biol* 324: 35-45.
4. Porter SL, Warren AV, Martin AC, Armitage JP (2002) The third chemotaxis locus of *Rhodobacter sphaeroides* is essential for chemotaxis. *Mol Microbiol* 46: 1081-1094.
5. Martin AC, Wadhams GH, Shah DSH, Porter SL, Mantotta JC, Craig TJ, Verdult PH, Jones H, Armitage JP (2001) CheR- and CheB-dependent chemosensory adaptation system of *Rhodobacter sphaeroides*. *J Bacteriol* 183: 7135-7144.