Table S2. Plasmids used in this study

Plasmid	Description	Source
pKD3	template plasmid for gene disruption; contains FRT flanked Clm <sup>R</sup> cassette	[1]
pKD4	template plasmid for gene disruption; contains FRT flanked Kan <sup>R</sup> cassette	[1]
pKM208	Amp <sup>R</sup> ; encodes IPTG-inducible lambda red recombinase	[2]
pRR48	Amp <sup>R</sup> cloning plasmid containing an IPTG inducible Ptac promoter	[3]
pBAD33	Clm <sup>R</sup> cloning plasmid containing arabinose inducible pBAD promoter	[4]
pGEN-MCS	High retention Amp <sup>R</sup> cloning plasmid	[5]
pPN007	Amp <sup>R</sup> ; pasT (from CFT073) cloned into PstI, HindIII of pRR48	This study
pPN009	Amp <sup>R</sup> ; pasT (from CFT073) cloned into BamHI, KpnI of pRR48	This study
pPN010	Amp <sup>R</sup> ; pasI (from CFT073) cloned into BamHI, KpnI of pRR48	This study
pPN011	Amp <sup>R</sup> ; pasTI (from CFT073) cloned into BamHI, KpnI of pRR48	This study
pPN012	Amp <sup>R</sup> ; pasT (from CFT073) with C-terminal FLAG cloned into PstI,	This study
pPN019	Amp <sup>R</sup> ; pasT (from CFT073) with GGGGP linker and C-terminal FLAG	This study
pPN020	Amp <sup>R</sup> ; pasT (from CFT073) with GGGGP linker and N-terminal FLAG	This study
pPN025	Amp <sup>R</sup> ; pasT (from CFT073) with N-terminal FLAG cloned into PstI,	This study
pPN028	Amp <sup>R</sup> ; pasT (from MG1655) cloned into PstI, HindIII of pRR48	This study
pPN041	Amp <sup>R</sup> ; pasT (from CFT073) with N-terminal 6X-His cloned into PstI,	This study
pPN043	Amp <sup>R</sup> ; pasT (from CFT073) with C-terminal 6X-His cloned into PstI,	This study
pPN055	Amp <sup>R</sup> ; first 207 nucleotides of <i>pasT</i> (from CFT073) cloned into PstI,	This study
pPN060	Clm <sup>R</sup> ; pasI (from CFT073) cloned into SacI, HindIII of pBAD33 with	This study
pPN064	Amp <sup>R</sup> ; nucleotides 208-477 of pasT (from CFT073) cloned into PstI,	This study

pPN067	Amp <sup>R</sup> ; nucleotides 28-477 of <i>pasT</i> (from CFT073) cloned into PstI,	This study
pPN068	Amp <sup>R</sup> ; nucleotides 40-477 of <i>pasT</i> (from CFT073) cloned into PstI,	This study
pPN069	Amp <sup>R</sup> ; nucleotides 88-477 of <i>pasT</i> (from CFT073) cloned into PstI,	This study
pPN078	Amp <sup>R</sup> ; pasT (from CFT073) with C-terminal FLAG tag cloned into	This study
pPN079	Amp <sup>R</sup> ; nucleotides 28-477 of <i>pasT</i> (from CFT073) with C-terminal	This study
pPN080	Amp <sup>R</sup> ; nucleotides 40-477 of <i>pasT</i> (from CFT073) with C-terminal	This study
pPN081	Amp <sup>R</sup> ; nucleotides 88-477 of <i>pasT</i> (from CFT073) with C-terminal	This study
pPN083	Amp <sup>R</sup> ; pasTI operon including native promoter (243 bp upstream of	This study
	pasTI; all sequences from CFT073) cloned into HindIII, NcoI sites of	
	pGEN-MCS	

## **Supplemental References**

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- 3. Zhou Q, Ames P, Parkinson JS (2009) Mutational analyses of HAMP helices suggest a dynamic bundle model of input-output signalling in chemoreceptors. *Mol Microbiol* 73: 801-814.
- 4. Guzman LM, Belin D, Carson MJ, Beckwith J (1995) Tight regulation, modulation, and high-level expression by vectors containing the arabinose PBAD promoter. *J Bacteriol* 177: 4121-4130.
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