

Fig. S1

Fig. S1. Effect of RegB on Fla2-dependent swimming. The effect of two different *regB* alleles on the Fla2 dependent swimming was tested. Swimming plates were seeded with the indicated strain. After inoculation, the plates were incubated aerobically or anaerobically under continuous illumination for 60 h. A reduction in the swimming halo of the $\Delta regB$ and $\Delta regB/pRK_regB_{S267}$ grown under heterotrophic conditions was observed.

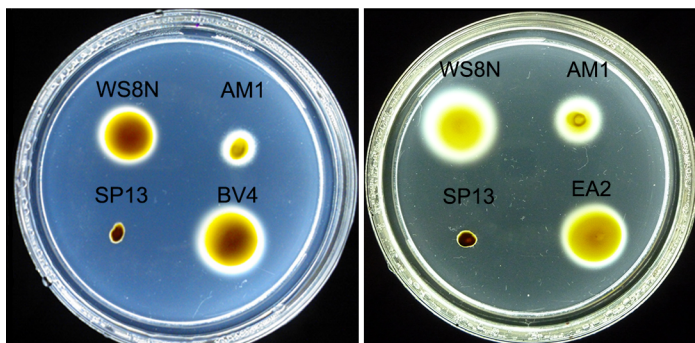


Fig. S2

Fig. S2. Effect of *chpT* or *ctrA* null mutations on swimming with the Fla1 flagellum. Swimming plates were made with Sistrom's minimal medium with 15 mM succinic acid and 0.22% agar. Plates were seeded with the indicated strain; after inoculation, the plates

were incubated anaerobically under continuous illumination for 48 h. BV4 (WS8 $\Delta cpdT::\Omega^{SpC}$), EA2 (WS8 $\Delta ctrA::aadA$)

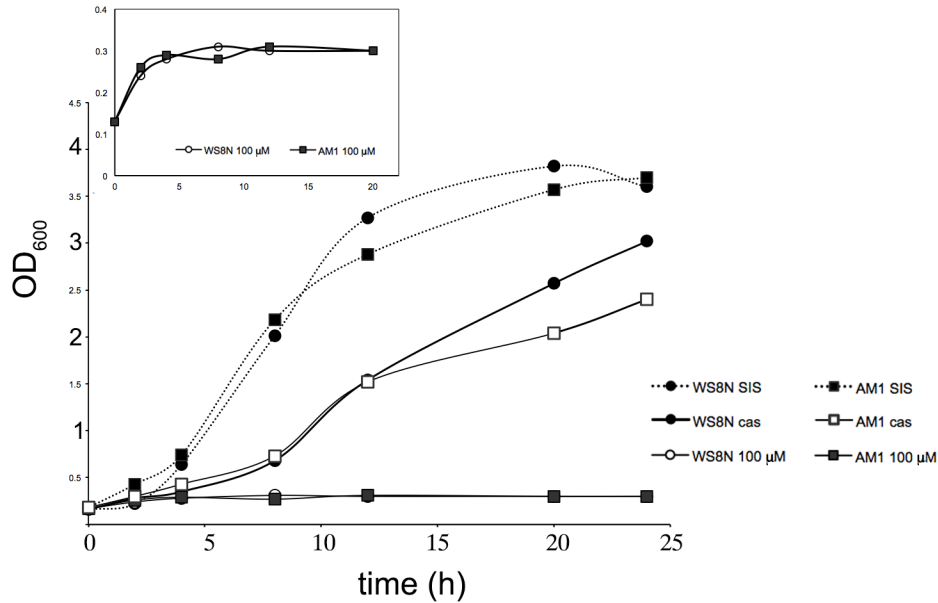


Fig. S3

Fig. S3. Growth curve of AM1 and WS8N. Growth curves were made using Sistrom's minimal medium with 15 mM or 100 μM succinic acid as carbon source (Sistrom's MM or 100 μM, respectively), or 0.2% casamino acids. The cultures were grown photoheterotrophically in screw-cap tubes under continuous illumination. The inset shows the growth curves of WS8N and AM1 grown in 100 μM succinic acid.

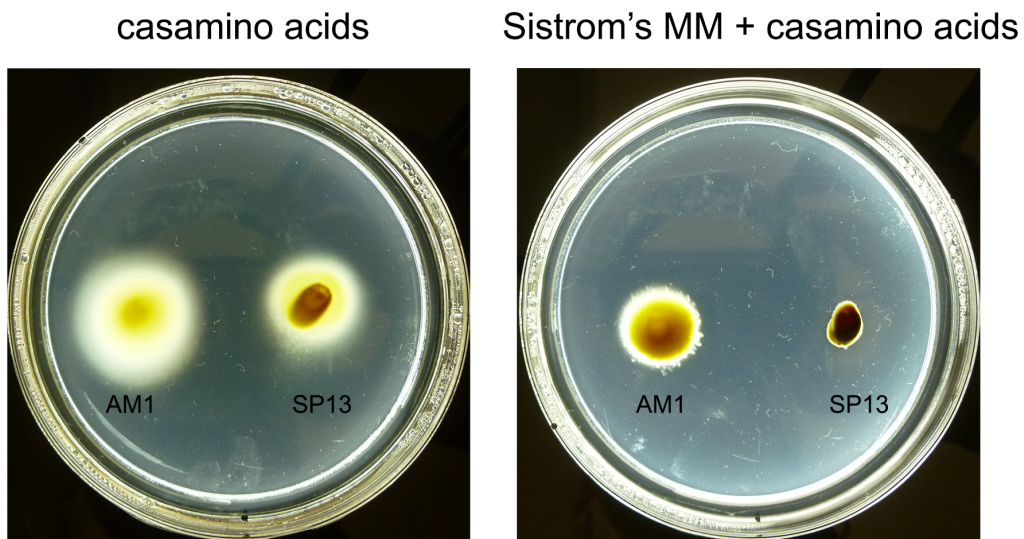


Fig. S4

Fig. S4. Effect of succinic acid on the swimming motility with Fla2 flagella. Swimming plates were prepared with Siström's minimal medium without succinic acid but including 0.2% of casamino acids, or a mixture of 0.2% casamino acids plus 15 mM succinic acid. Plates were seeded with the indicated strain, and incubated anaerobically under continuous illumination for 60 h.