

Additional file 1

PCR primers used in this study

Direction	Description	Sequence (5' → 3') ^a
forward	FcpD_wt	gaattcatgaagactgctgtcattgc
reverse	FcpD_wt	aaccatggtggtggcaaccgaagtacgggccgcttcttg
forward	eGFP_wt	aaccatggtgagcaagggcgaggagc
reverse	eGFP_wt	ctaagcttactgttacagctcgtccatgc
reverse	FcpD_K20E+R24E	aaccatggtggtggcaaccgaagt <u>ctcggccgcttctcgg</u>
reverse	FcpD_K20A+R24A	ccatggtggtggcaaccgaagt <u>agcggccgcttcg</u> cgca gggg
forward	eGFP_K4E	aaccatggtgagc <u>agggcgaggagc</u>
reverse	FcpD_K20R	aaccatggtggtggcaaccgaagtacgggccgctt <u>ctcgg</u>
forward	eGFP_K4R	aaccatggtgagc <u>agggcgaggagc</u>
forward	eGFP_K4A	ccatggtgagc <u>cgggcgaggagc</u>
reverse	FcpD_K20E+N21K+R24E	ttccatggtggtggcaaccgaagt <u>ctcggccgccttctc</u>
reverse	FcpD_K20E+N21R+R24E	ttccatggtggtggcaaccgaagt <u>ctcggccgcctctc</u>
reverse	FcpD_ΔK20-T30	ttccatggcaggggcaaagggcgcggc
forward	(self assembly) GFP11	agctaggagggtctgtgtgg
reverse	(self assembly) GFP11	aagcttggtaccttatgtaatcccagc

^aCodons causing amino acid substitutions are underlined