

Table S1. Small unannotated open reading frame found in the intergenic regions of the *grp* locus.

ORFA (IGR2)

ATGATCGCTATTCAGAGCGGGGCTATTTTGCAAGGAAGTTTAAACGCAGATCTTTTATTACAAACCTCGGGTGGAT
TTTATTGTCAATTGCGGGAATGCAAAAGCAAGATAGTCCCACTGACGCGCAAAACATTTTGTCTGAATAACCTTAG
CATTATGATAATTAATAA

ORFB (IGR3) conserve in many *E. coli* strains

GTGATTAGTGCCACCTTACCCTGCTGCGCCGCCTTAACCGCTTCTGTTCGTCAGGCCAGCATTTTGCATCCAGCTT
CCTTCAGATTTACCTCGCGATGAACACCCTTGCCTTCCGCTAACACTTCCCCTCACCGGGTGTGTGGAGGACTTTC
ACCTCTTAGTCGTTCTTCTGCCACCACAGTTGAAGAACAGCGCCAGTCACGGCGCACATAACAAAAAGCCAGCAGG
CAGACACTGCTGGCTTTTTGTTATGGCGGGATTA AACAGGGGAACCAAGGTAATAA

ORFC (IGR4)

ATGGATCACAGCAACAAAAACAGCTCCGGCTCTGAAAGTAATGCTTCGGTTATTTGCAAGGGATACTCCTTTTCAA
ACCTTGCTGAACAGTGCAGATACACAGGGAAACGTATAACCAGAACTGCCACAATACAAACGCCAGTTACTGGCG
ATACGAATGGAATGACGAGGCAGTCTGTGAGAAAGCCCCACATGAACGATCACACCTACATAGGAGGTGTTTTA
AAATTGATCGAGTAGGAGGCGGGATCACTCCCGCCGTCTCTACACCACCGTACGTGCGGTTCCGCATACGGCG
GTTTCATGTAA

ORFD (IGR4)

ATGTGGGGCTTTCTGACAGACTGCCTCGTCATTCCATTGATCGCCAGTAACTGGCGTTTGTATTGTGGCAGTTCT
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TTACTTTCAGAGCCGGAGCTGTTTTTGTGCTGTGA

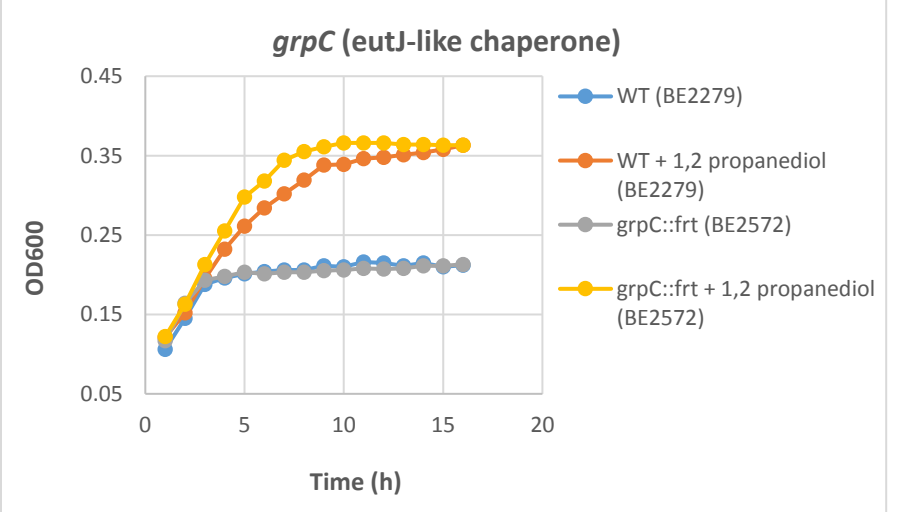
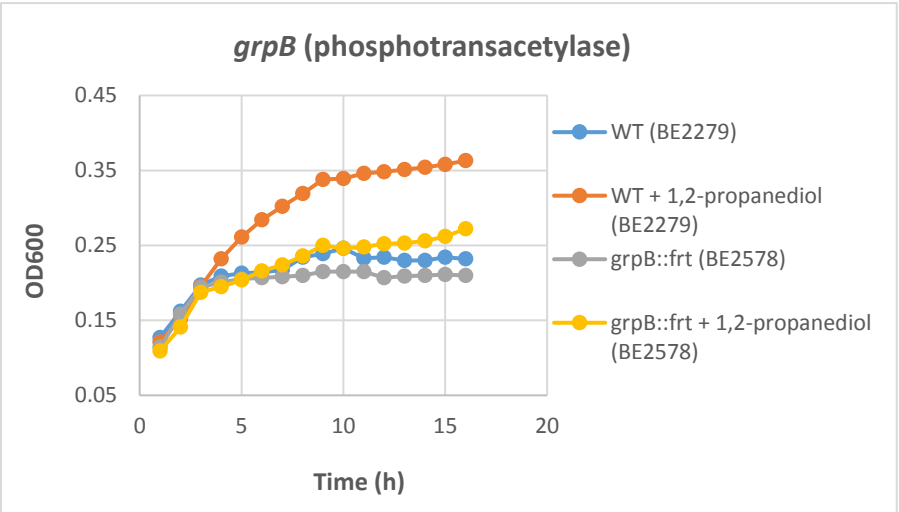
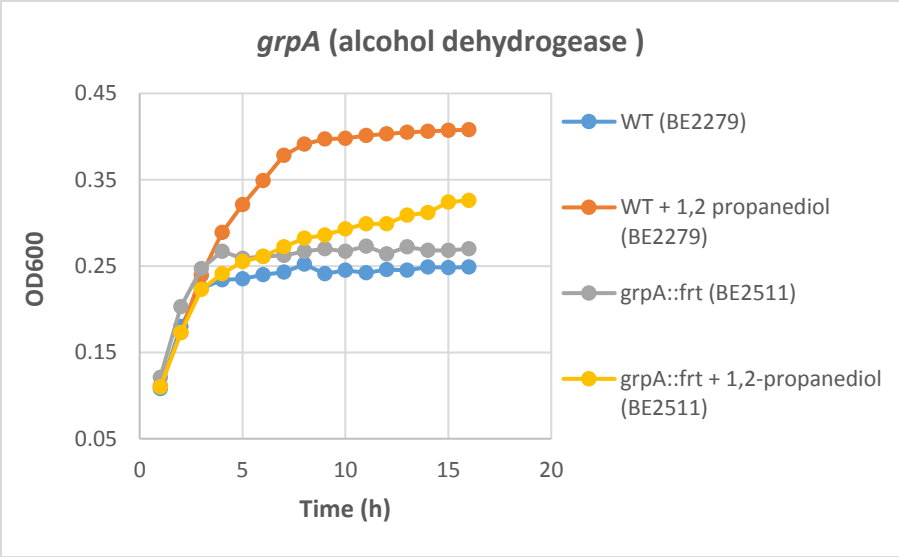
ORFE (IGR4) (possibly and extension of *mrtB*)

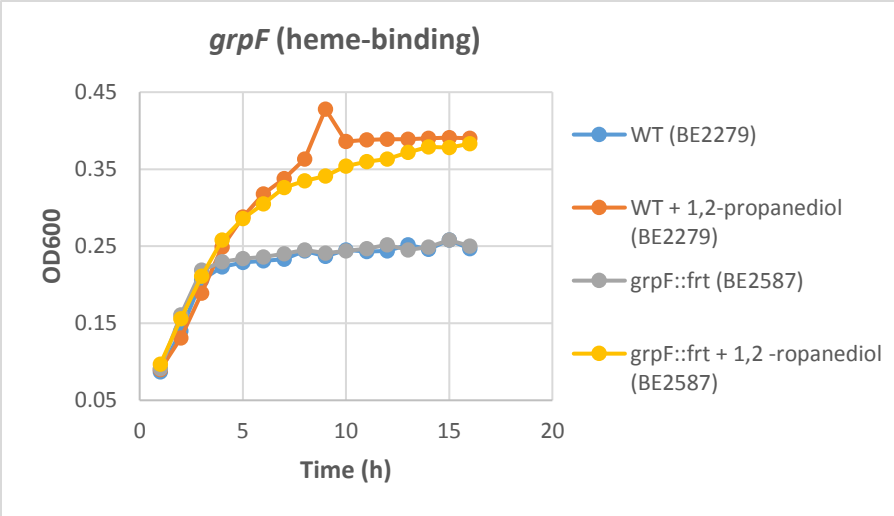
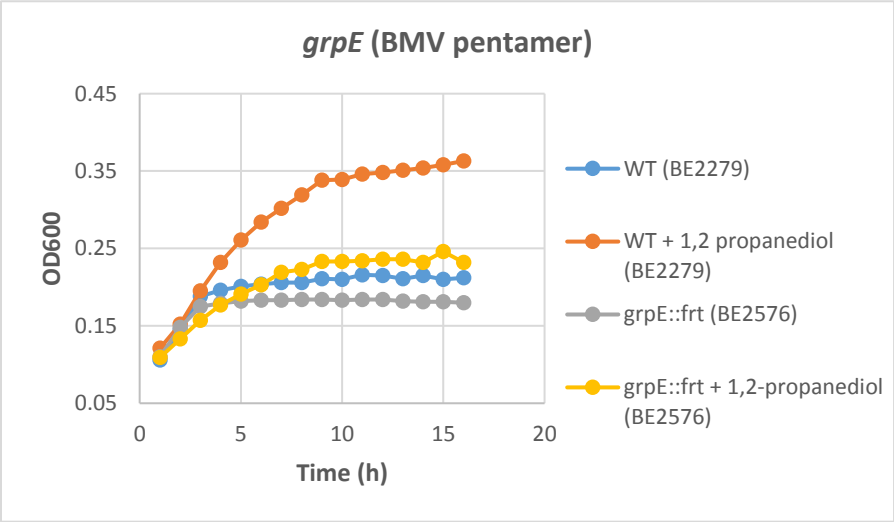
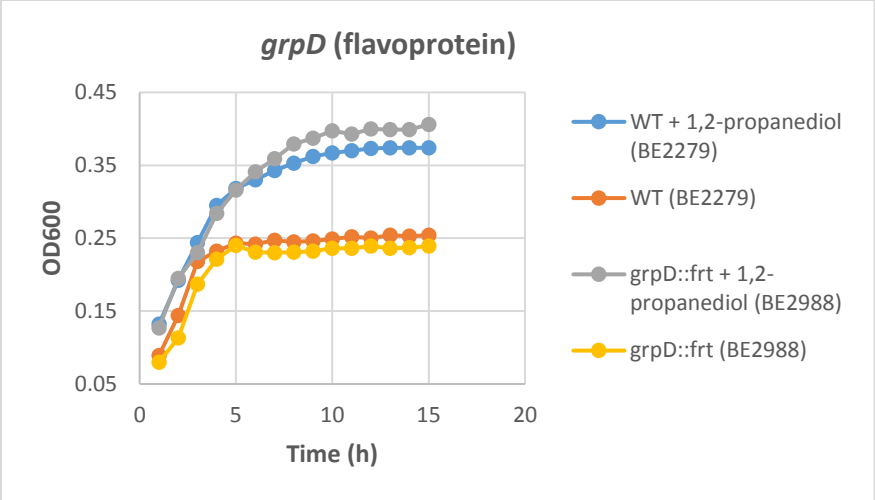
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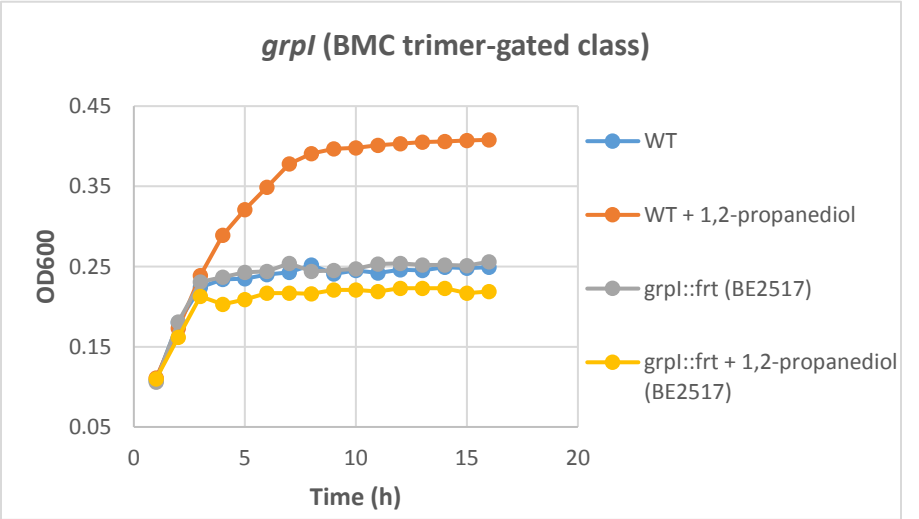
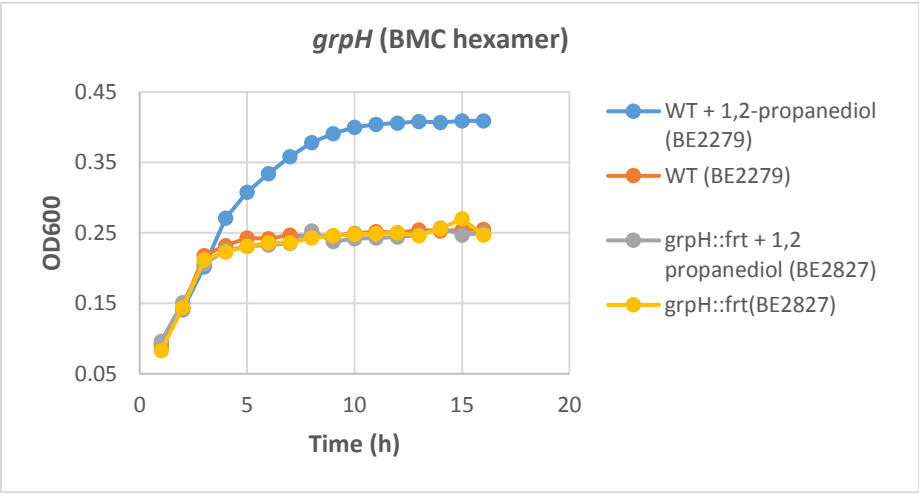
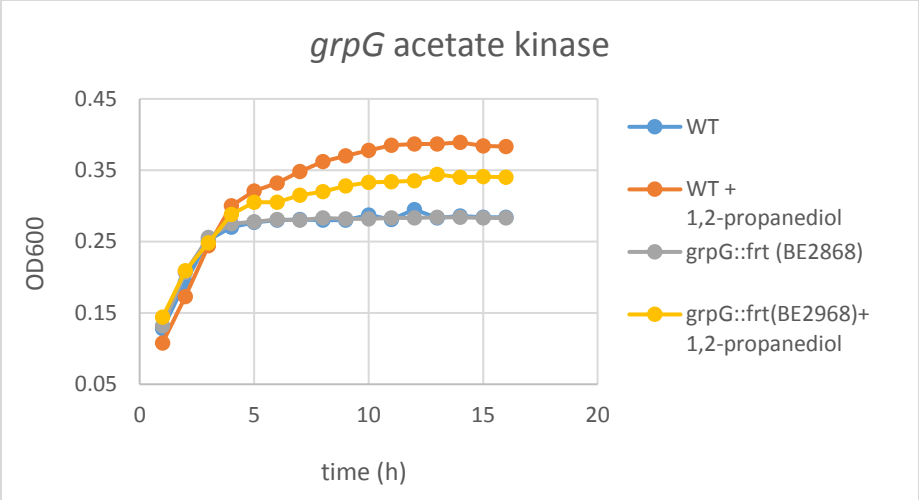
Table S2 Strains used in the study

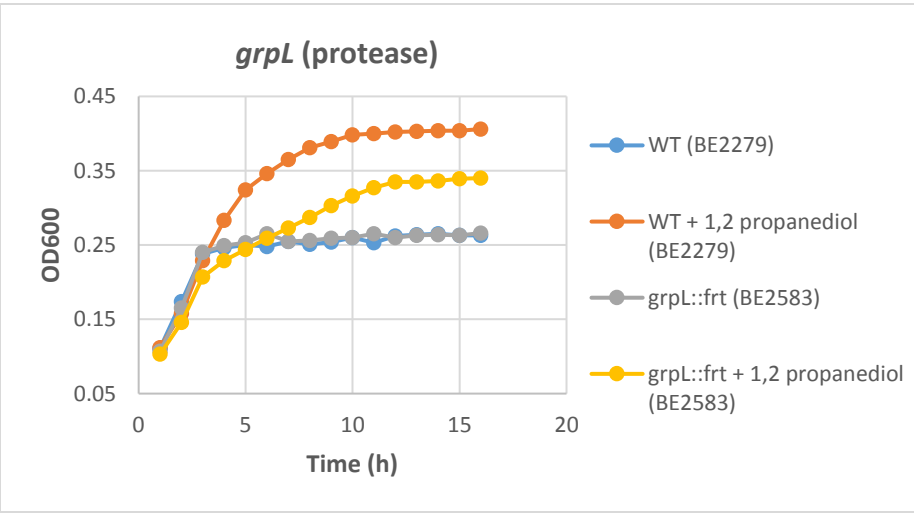
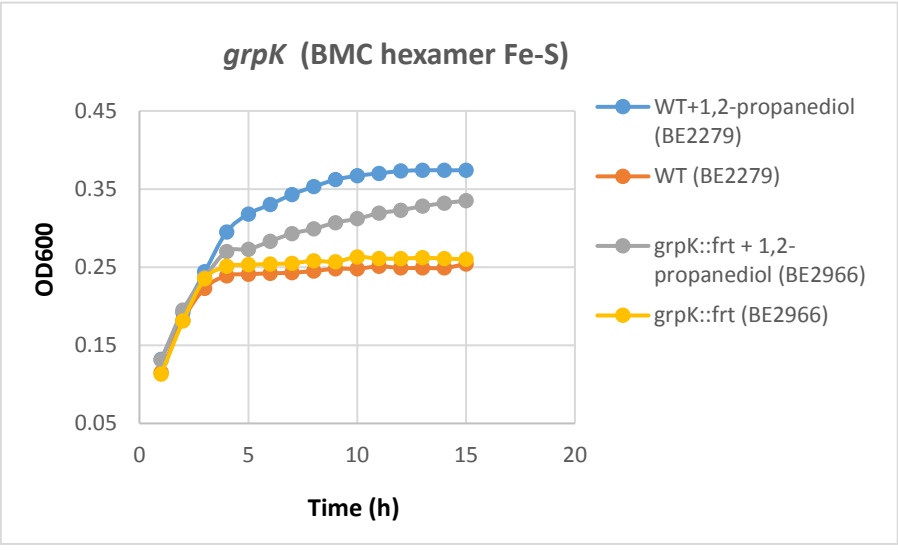
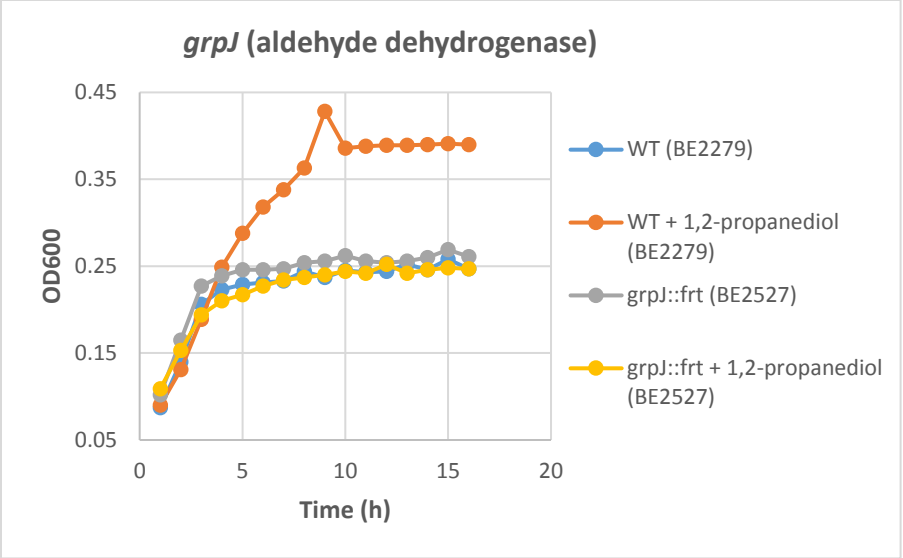
Strain number	Genotype	Source
BE2279	<i>E. coli</i> CFT073 wild type (WT)	Harry Mobley
BE2511	Δ grpA::frt	This study
BE2578	Δ grpB::frt	This study
BE2572	Δ grpC::frt	This study
BE2988	Δ grpD::frt	This study
BE2576	Δ grpE::frt	This study
BE2587	Δ grpF::frt	This study
BE2968	Δ grpG::frt	This study
BE2827	Δ grpH::frt	This study
BE2517	Δ grpI::frt	This study
BE2527	Δ grpJ::frt	This study
BE2966	Δ grpK::frt	This study
BE2583	Δ grpL::frt	This study
BE2593	Δ grpM::frt	This study
BE2585	Δ grpN::frt	This study
BE2521	Δ grpO::frt	This study
BE2529	Δ mrtA::frt	This study
BE2523	Δ mrtB::frt	This study
BE2460	Δ grpP::frt	This study
BE2986	Δ grpQ::frt	This study
BE2458	Δ grpR::frt	This study
BE2525	Δ grpS::frt	This study
BE2790	WT/pLac22	This study
BE2716	Δ grpA::frt/pLac22-grpA	This study
BE2733	Δ grpA::frt +pLac22	This study
BE2866	Δ grpB::frt/pLac22-grpB	This study
BE2869	Δ grpB::frt/pLac22	This study
BE2643	Δ grpE::frt/pLac22-grpE	This study
BE2644	Δ grpE::frt/pLac22	This study
BE2866	Δ grpG::frt/pLac22-grpG	This study
BE2869	Δ grpG::frt/pLac22	This study
BE3040	Δ grpH::frt/pLac22-grpH	This study
BE2836	Δ grpH::frt/pLac22	This study
BE2630	Δ grpI::frt/pLac22-grpI	This study
BE2636	Δ grpI::frt/pLac22	This study
BE2715	Δ grpJ::frt/pLac22-grpJ	This study
BE2722	Δ grpJ::frt/pLac22	This study
BE3039	Δ grpK::frt/pLac22-grpK	This study

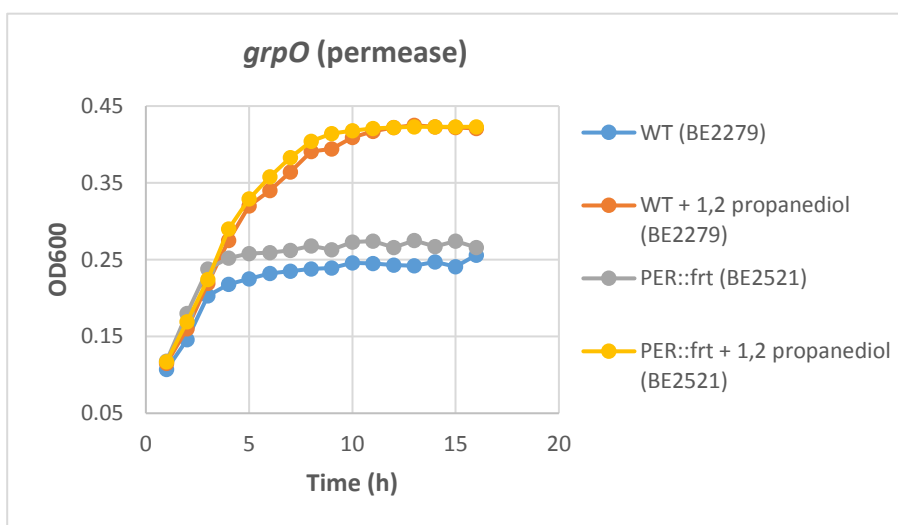
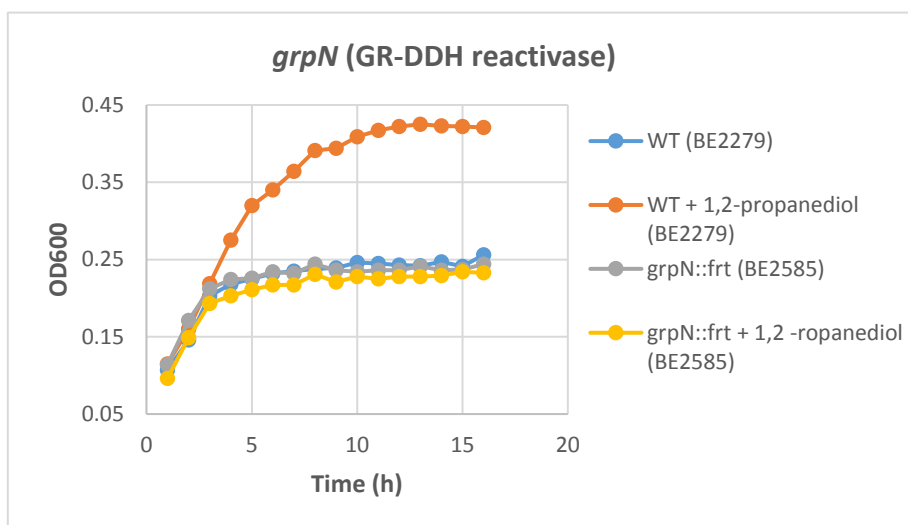
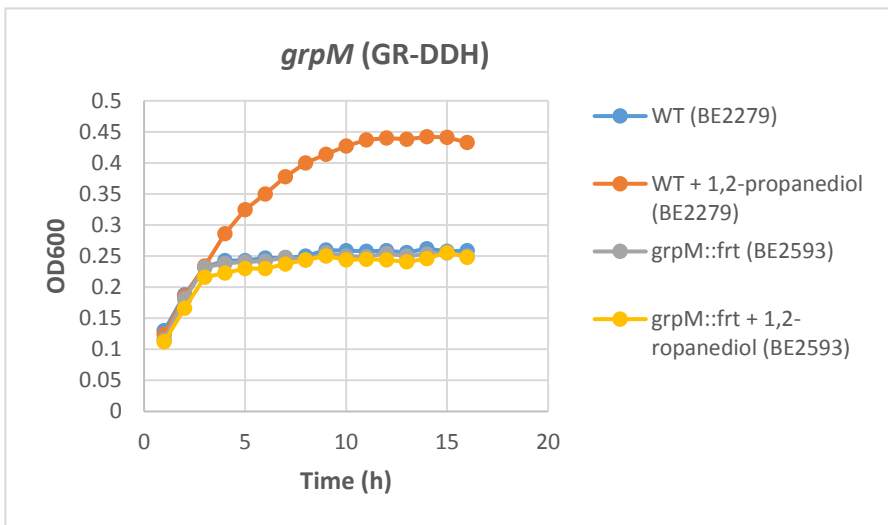
BE2637	$\Delta grpK::frit/pLac22$	This study
BE3042	$\Delta grpL::frit/pLac22-grpL$	This study
BE2734	$\Delta grpL::frit/pLac22$	This study
BE2628	$\Delta grpM::frit/pLac22-grpM-grpN$	This study
BE2634	$\Delta grpM::frit/pLac22$	This study
BE2629	$\Delta grpN::frit/pLac22-grpM-grpN$	This study
BE2635	$\Delta grpN::frit/pLac22$	This study
BE2632	$\Delta grpP::frit/pLac22-grpP$	This study
BE2638	$\Delta grpP::frit/pLac22$	This study
BE2633	$\Delta grpQ::frit/pLac22-grpQ$	This study
BE2639	$\Delta grpQ::frit/pLac22$	This study

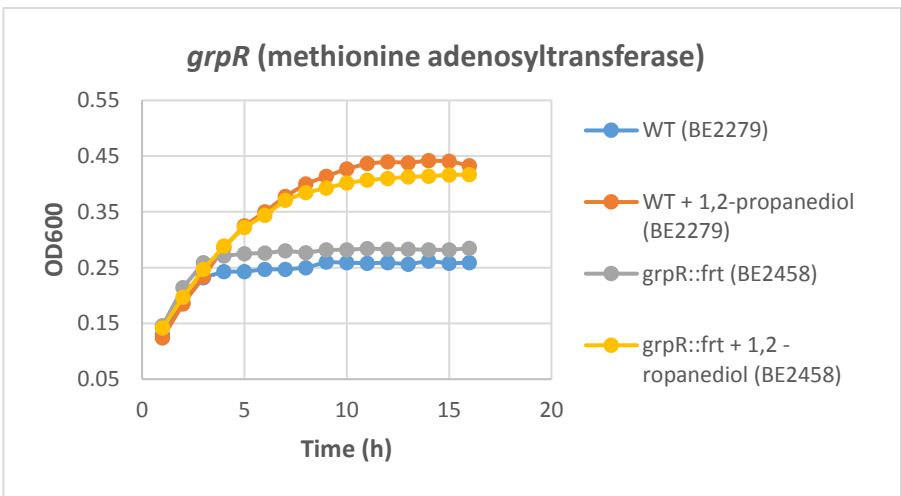
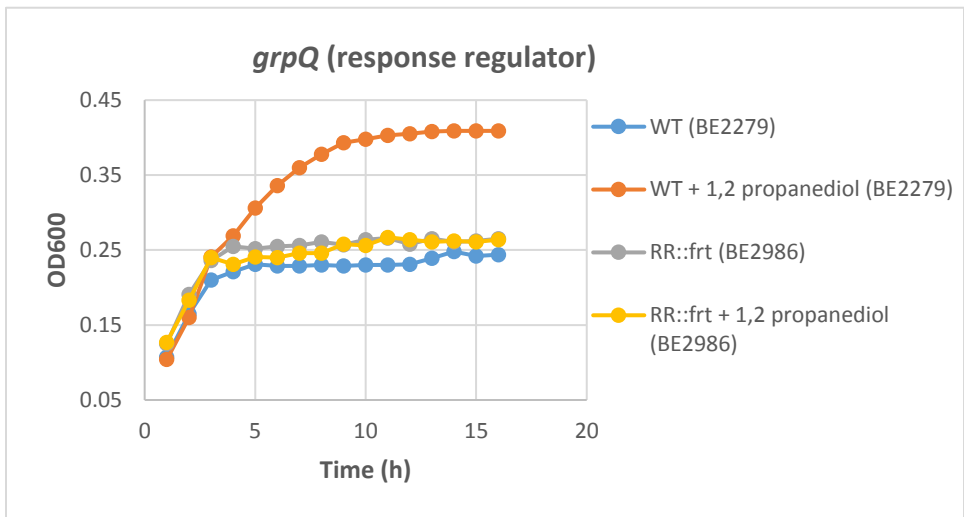
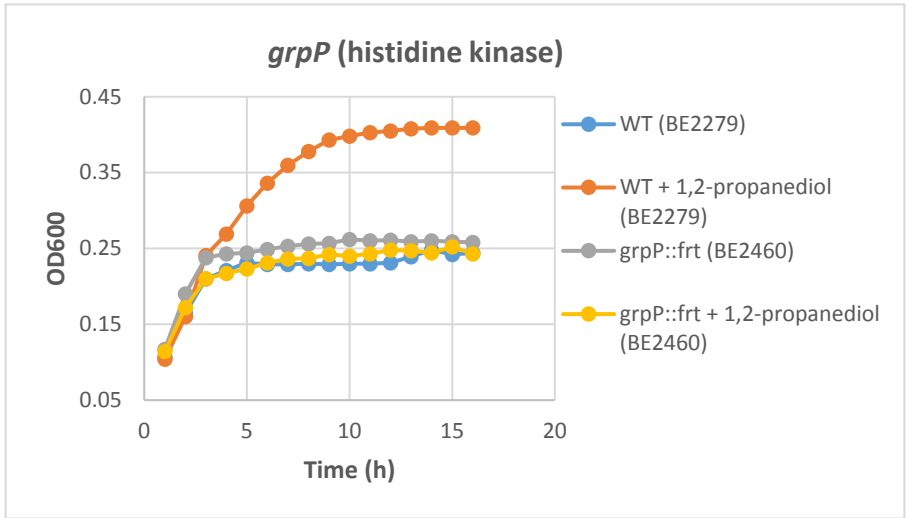












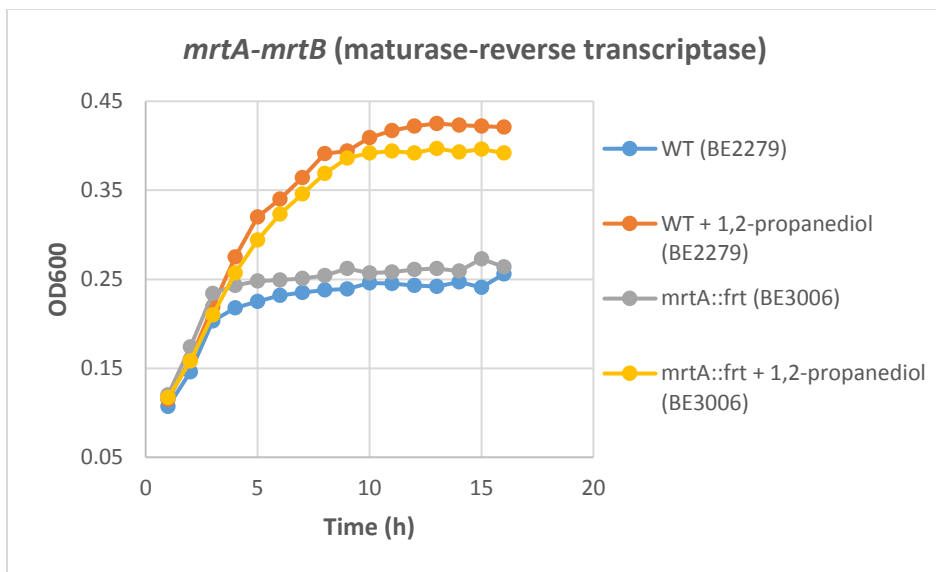
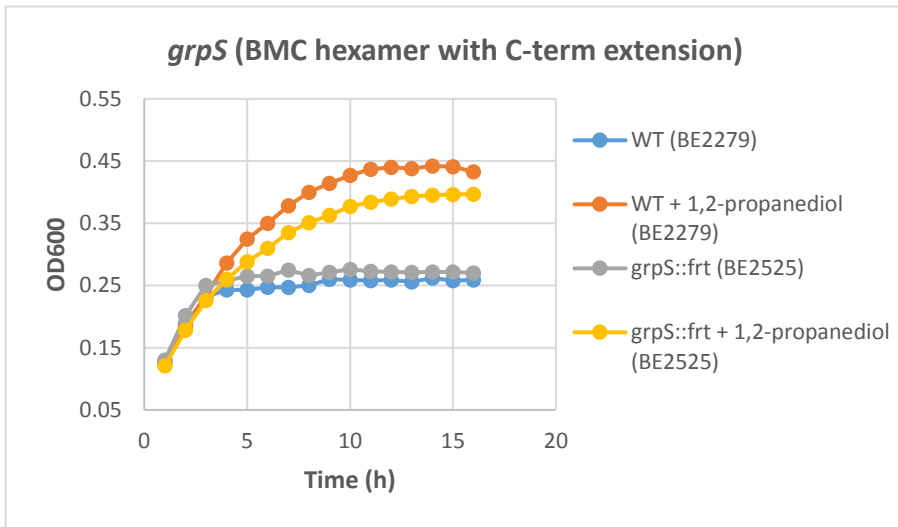
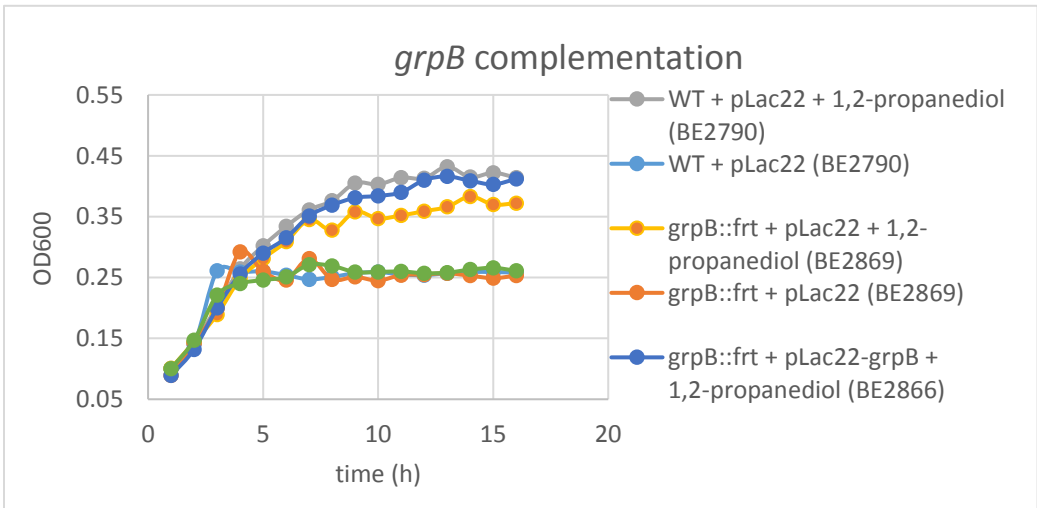
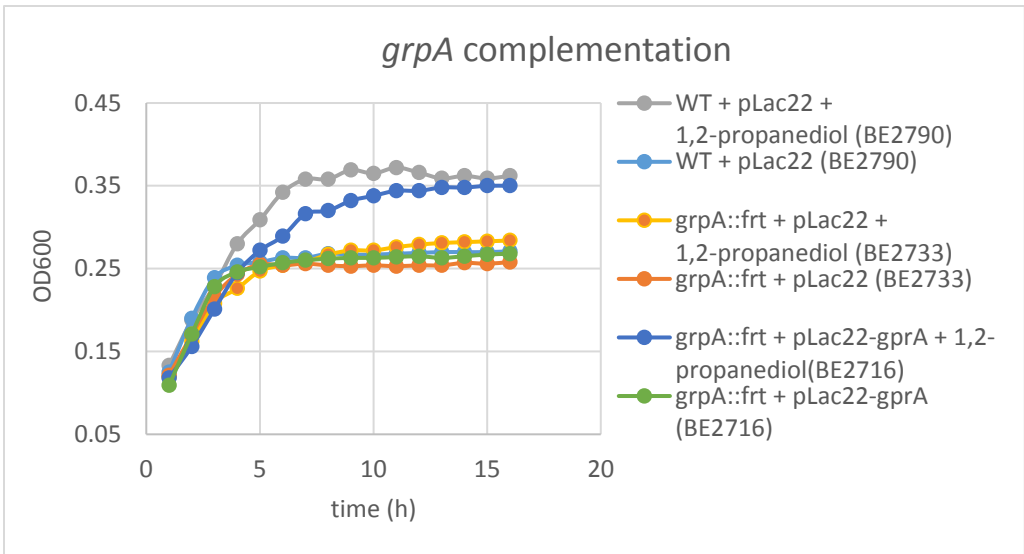
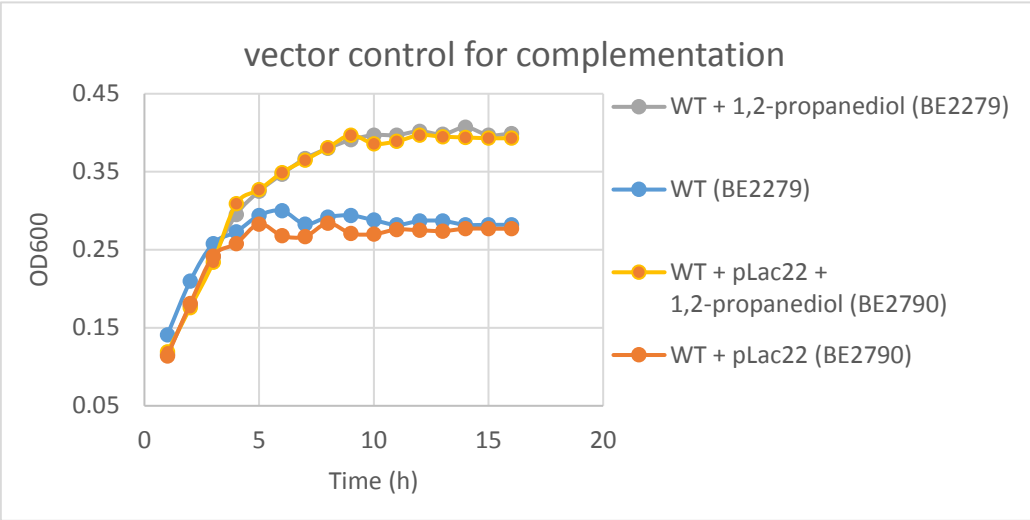
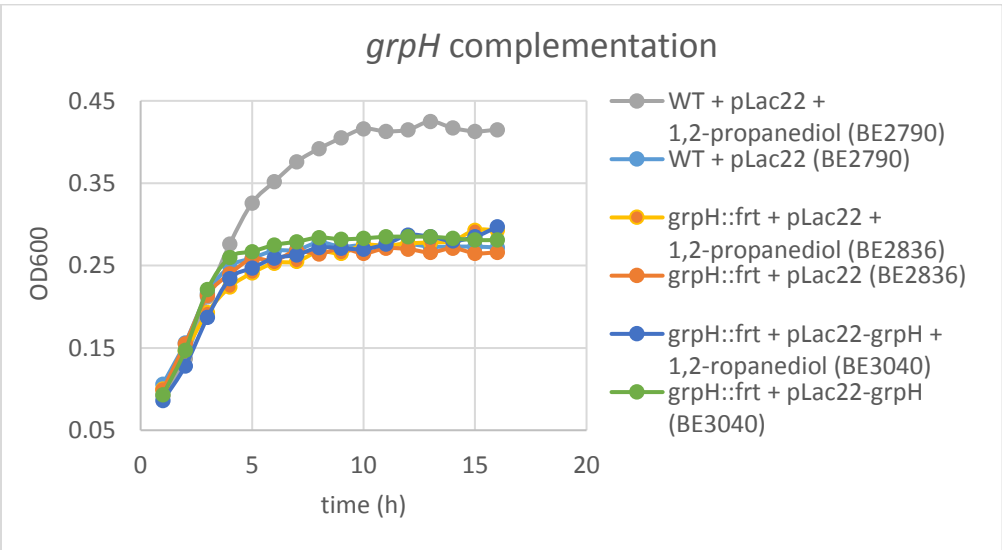
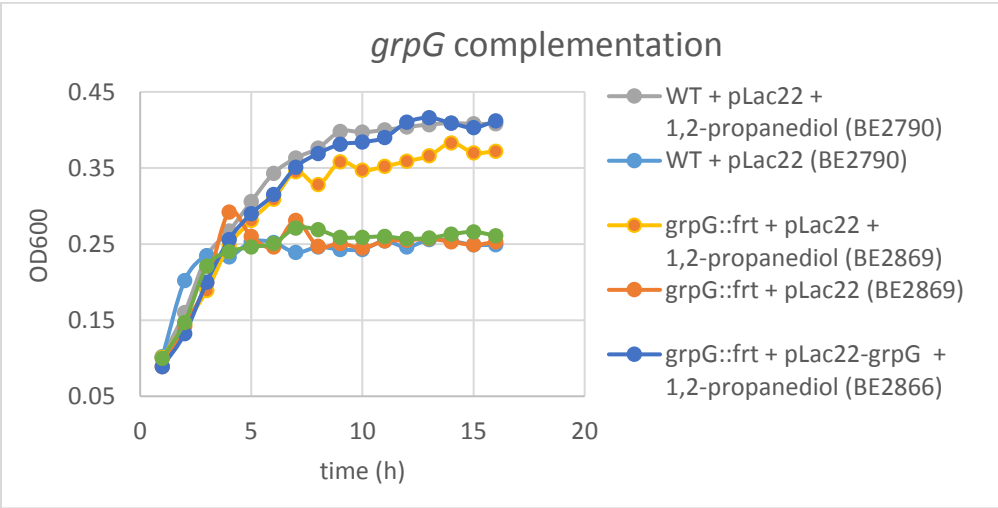
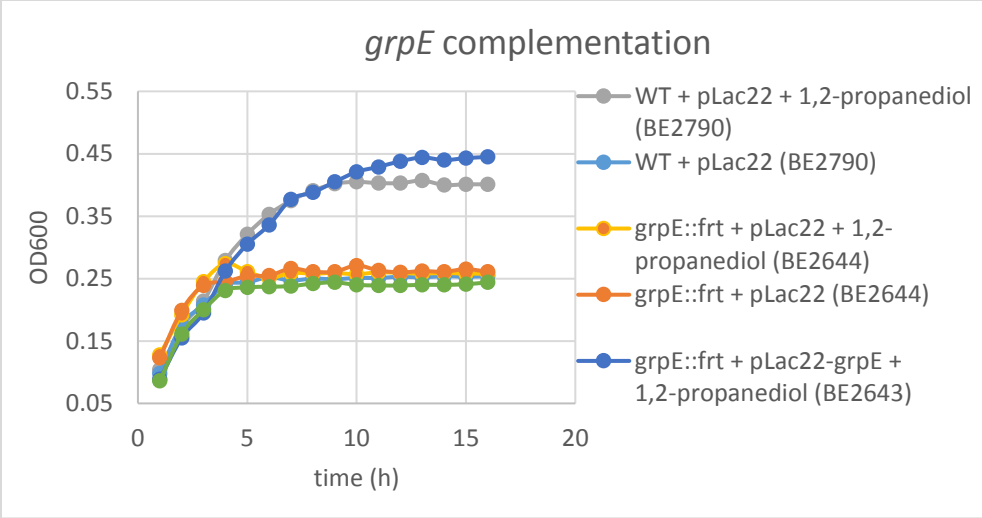
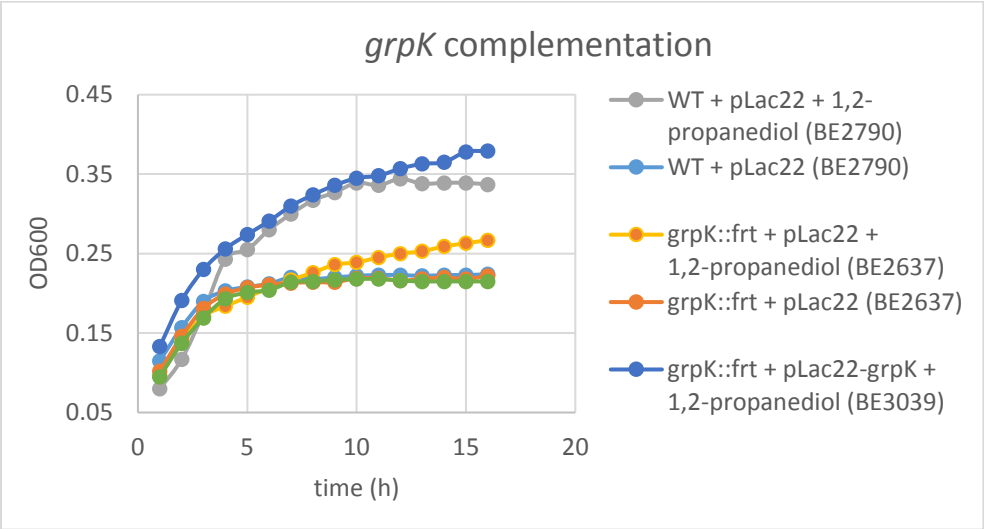
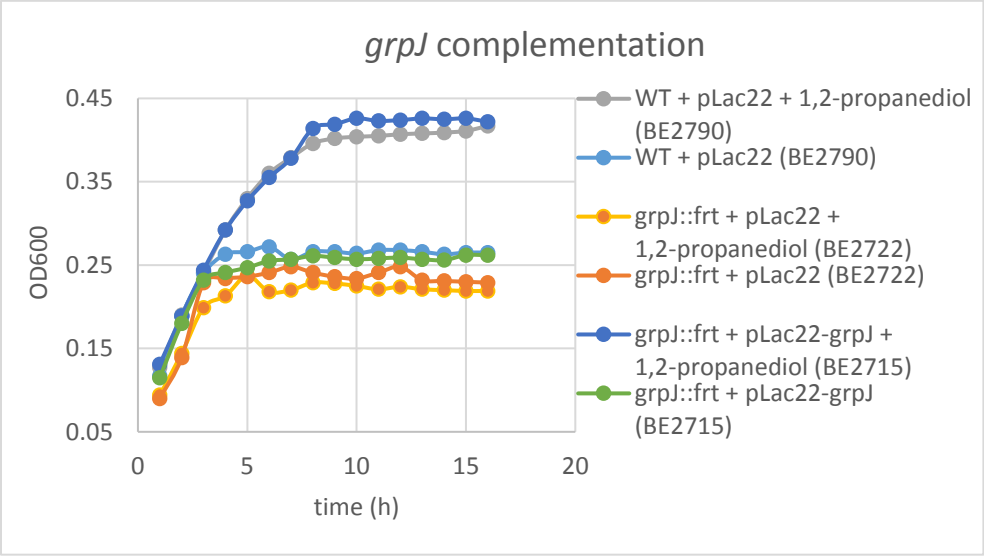
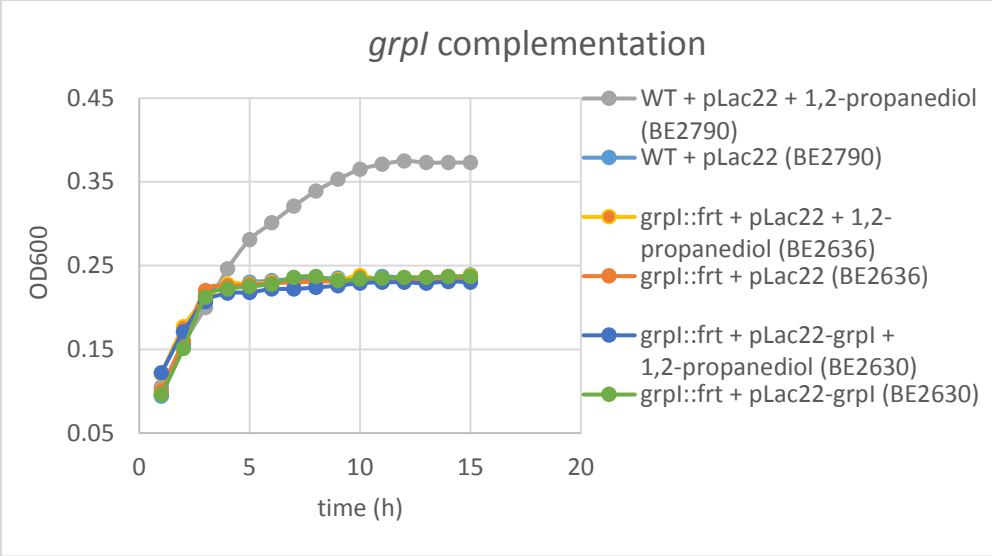
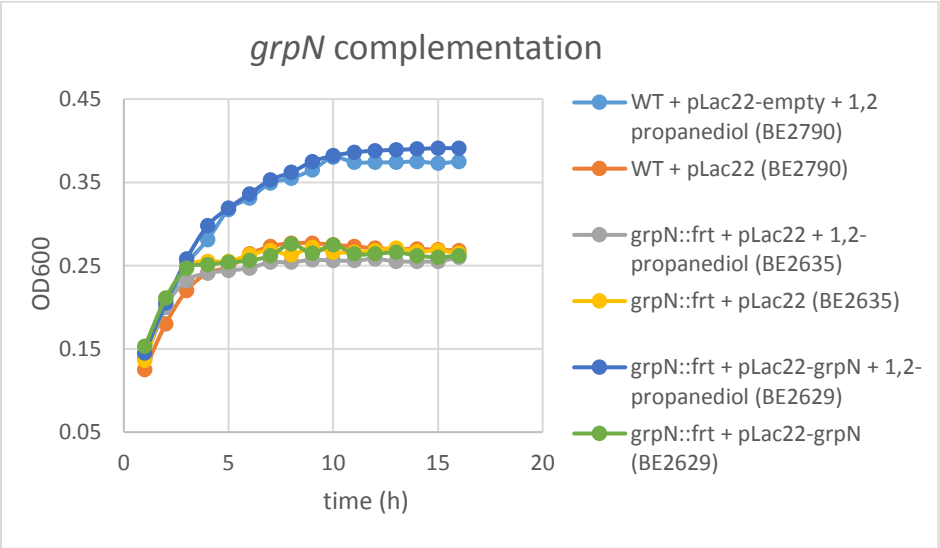
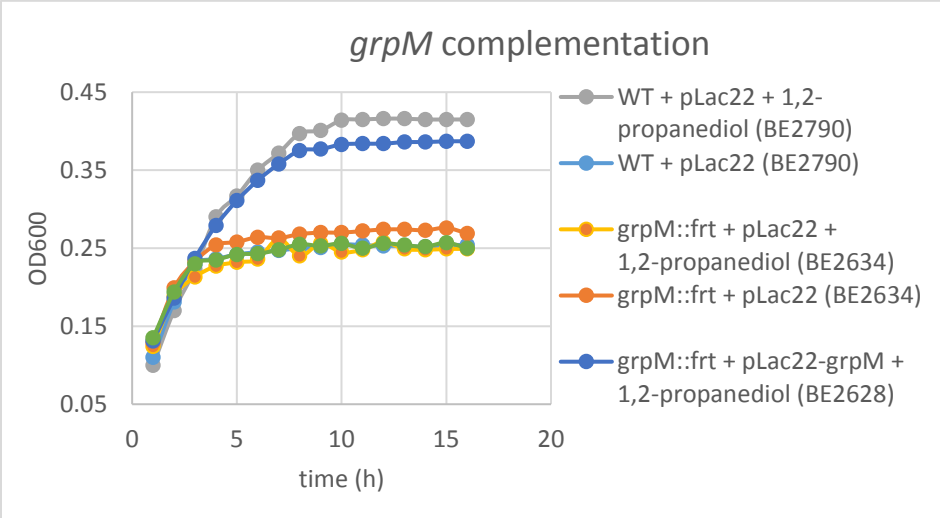
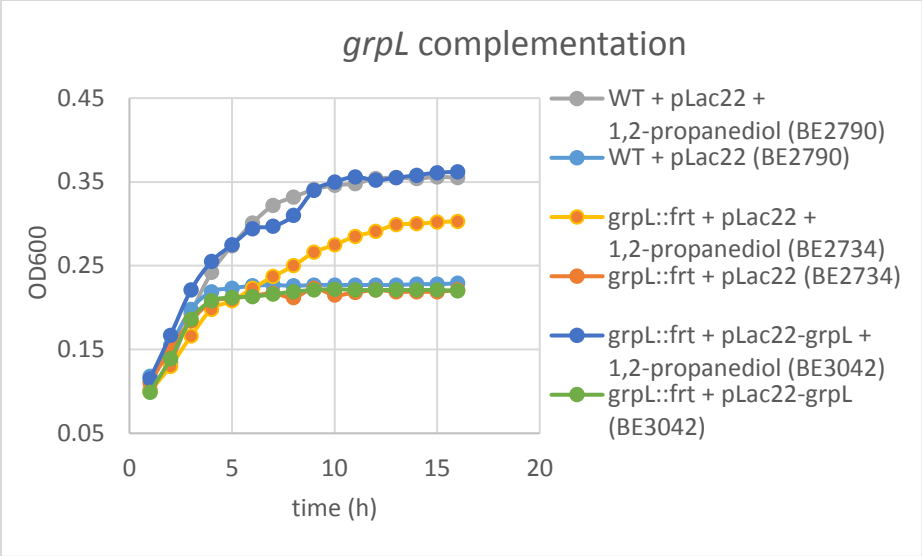


Figure S1. Growth of *grp* deletions on 1,2-PD. Growth of wild-type *E. coli* CFTO73 on 1,2-PD is compared to strains that have individual deletions of each *grp* gene. OD600 = optical density at 600 nm.









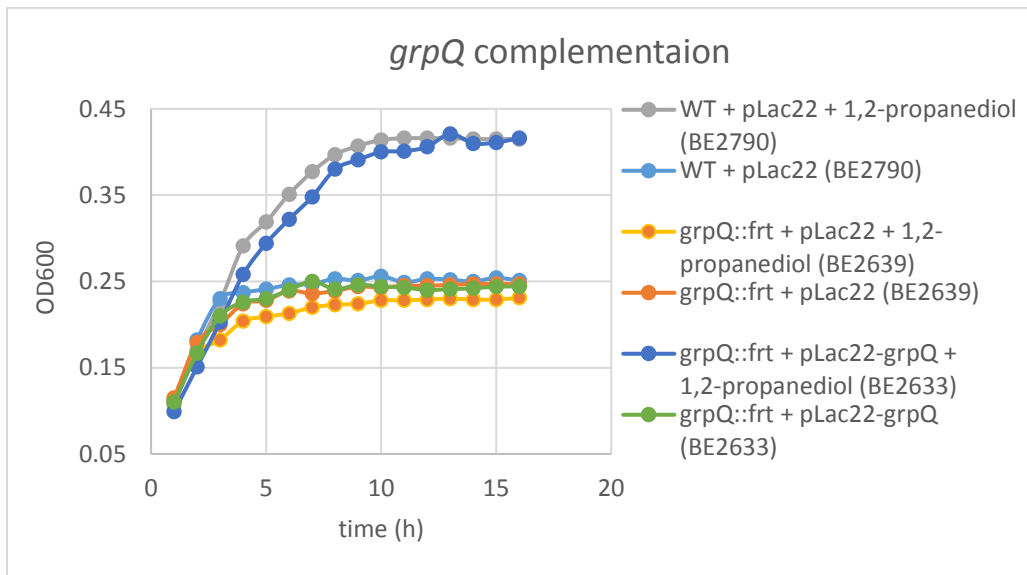
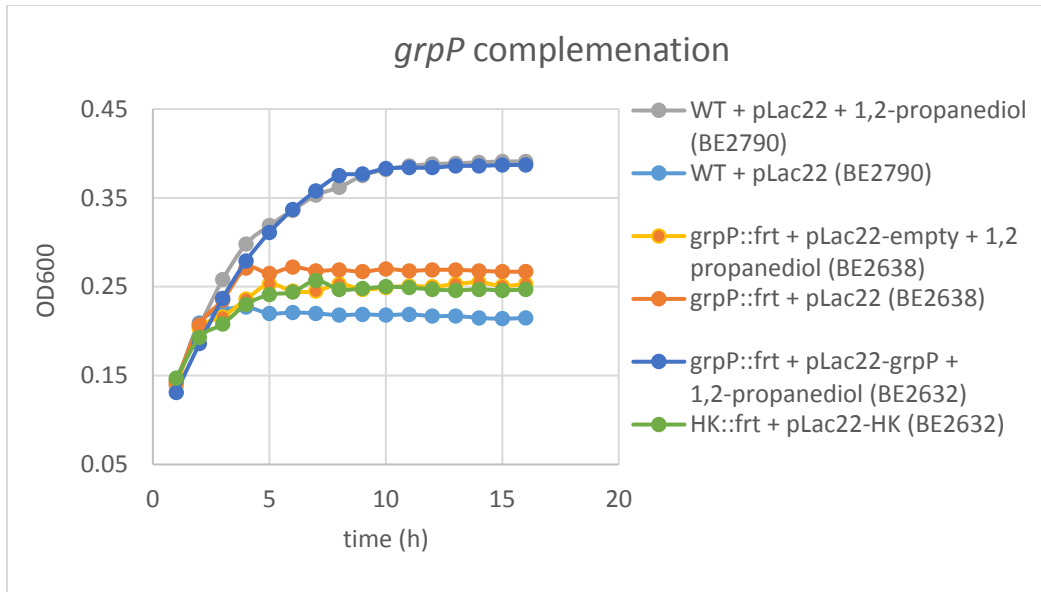


Figure S2. Complementation of *grp* mutants. Complementation tests were performed for thirteen *grp* deletions that showed impaired growth on 1,2-PD. Minimal clones expressed from pLac22 were tested for the ability to restore growth of each mutant on 1,2-PD. The first panel is a control that shows that the vector alone did not affect growth of wild type *E. coli* CFT073 on 1,2-PD. OD600 = optical density at 600 nM.