

Table S1. Bacterial strains and plasmids used in this study.

Stains and plasmids	Genotype or relevant characteristics	Source
Strains		
UA159	Wild type	Laboratory stock
$\Delta lrgAB$	$\Delta lrgAB::\Omega Km^r$	(29)
Δpta	$\Delta pta::NPKm^r$	(39)
$\Delta ackA$	$\Delta ackA::NPKm^r$	(38)
$\Delta pta\Delta ackA$	$\Delta pta::NPEm^r/\Delta ackA::NPKm^r$	(38)
KB12	Δpta carrying pDL278:: <i>pta</i> (<i>pta</i> -complemented strain)	(39)
KB034	$\Delta ackA$ carrying pDL278:: <i>ackA</i> (<i>ackA</i> -complemented strain)	(38)
UA159/ <i>PlrgA-gfp</i>	UA159 carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	(30)
UA159/pDL278	UA159 carrying pDL278	(30)
$\Delta lrgAB/PlrgA-gfp$	$\Delta lrgAB$ carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	This study
$\Delta lrgAB/pDL278$	$\Delta lrgAB$ carrying pDL278	This study
$\Delta pta/PlrgA-gfp$	Δpta carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	This study
$\Delta pta/pDL278$	Δpta carrying pDL278	This study
$\Delta ackA/PlrgA-gfp$	$\Delta ackA$ carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	This study
$\Delta ackA/pDL278$	$\Delta ackA$ carrying pDL278	This study
$\Delta pta\Delta ackA/PlrgA-gfp$	$\Delta pta\Delta ackA$ carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	This study
$\Delta pta\Delta ackA/pDL278$	$\Delta pta\Delta ackA$ carrying pDL278	This study
Plasmids		
pDL278	<i>E. coli-Streptococcus</i> shuttle vector, Sp^r	(36)
pDL278:: <i>PlrgA-gfp</i>	pDL278 carrying <i>gfp</i> gene fusion to <i>lrgA</i> promoter	(30)

Em^r, erythromycin resistant cassette; Km^r, kanamycin resistant cassette; Sp^r, spectinomycin resistant cassette; NP, nonpolar; Ω , polar.

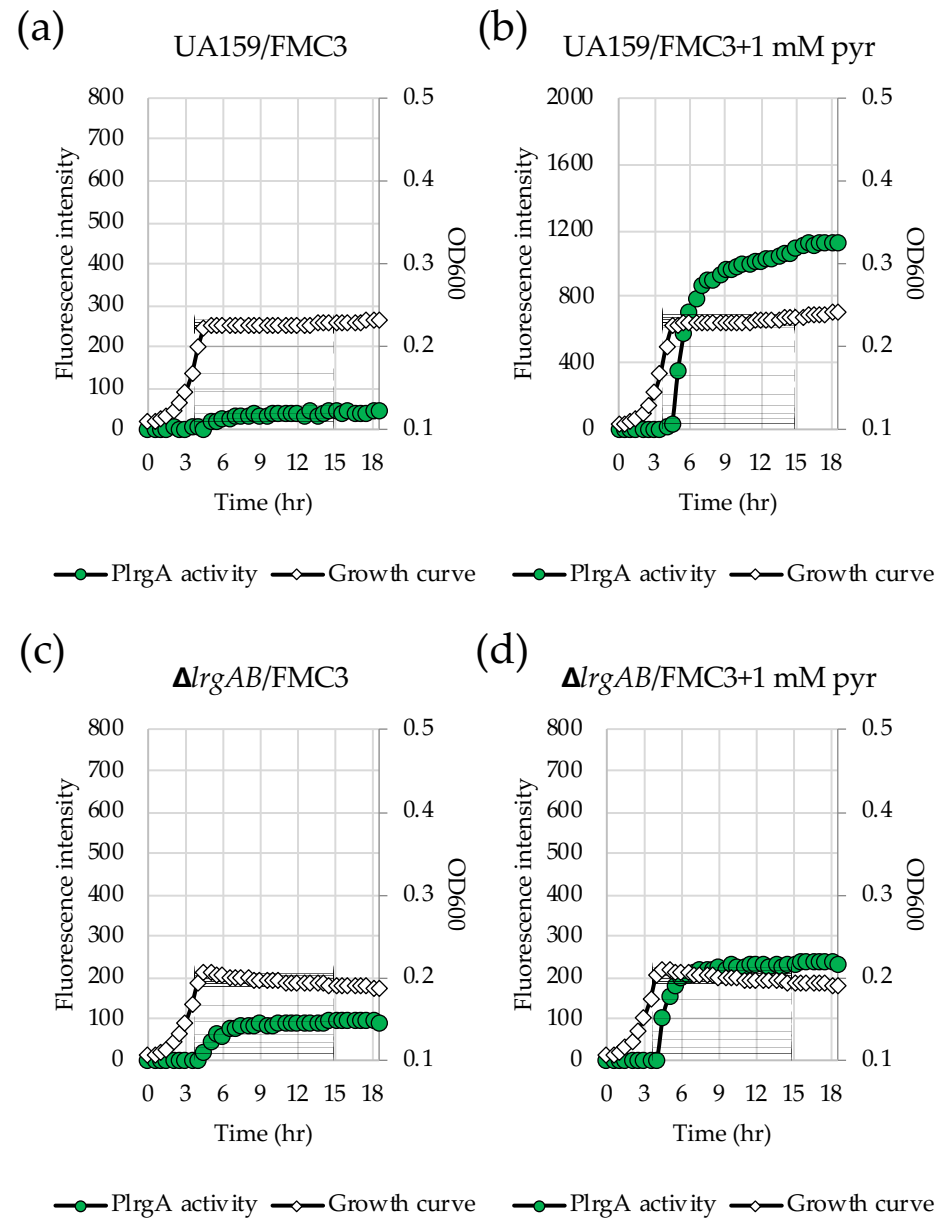


Figure S1. Change of *PlrgA* activity during growth of wild type and Δ *lrgAB* mutant strains in FMC3 medium with or without 1 mM exogenous pyruvate

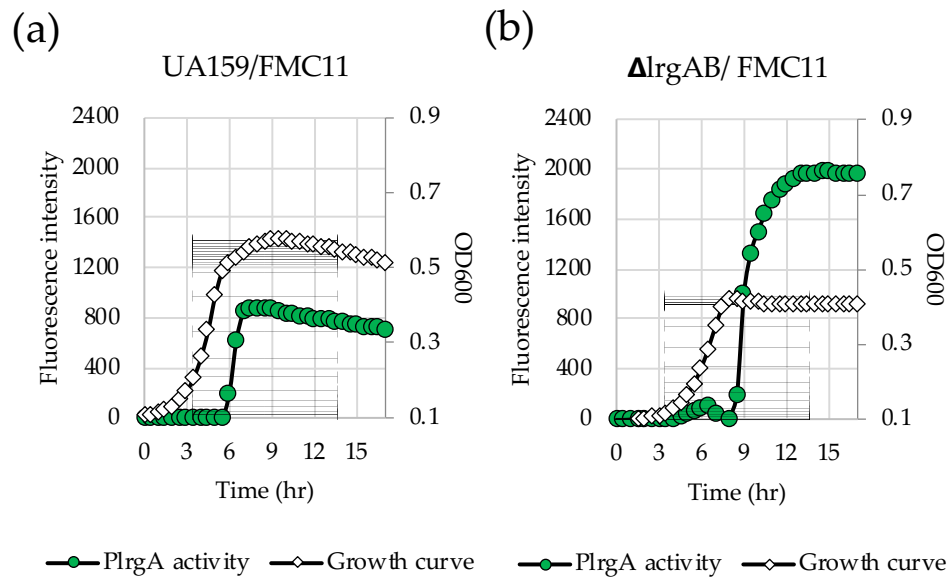


Figure S2. Change of *PlrgA* activity during growth of wild type and Δ *lrgAB* mutant strains in FMC11 medium.

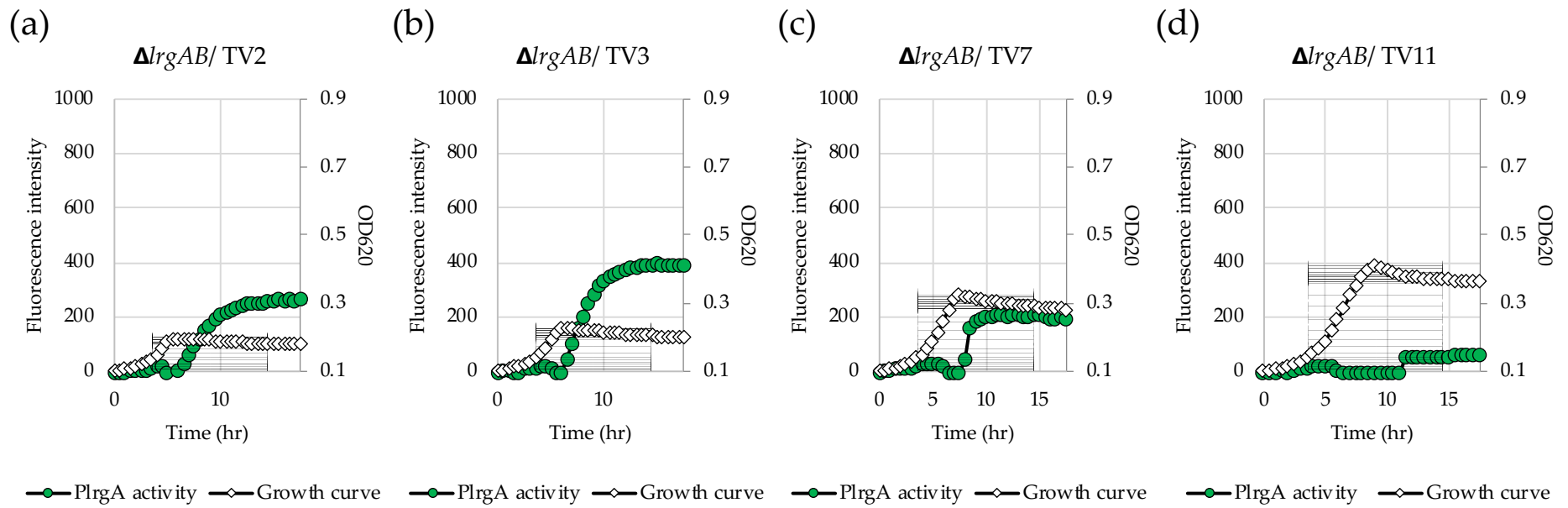


Figure S3. Changes of *PlrgA* activity during growth in TV medium containing low concentrations of glucose in the $\Delta lrgAB$ background.

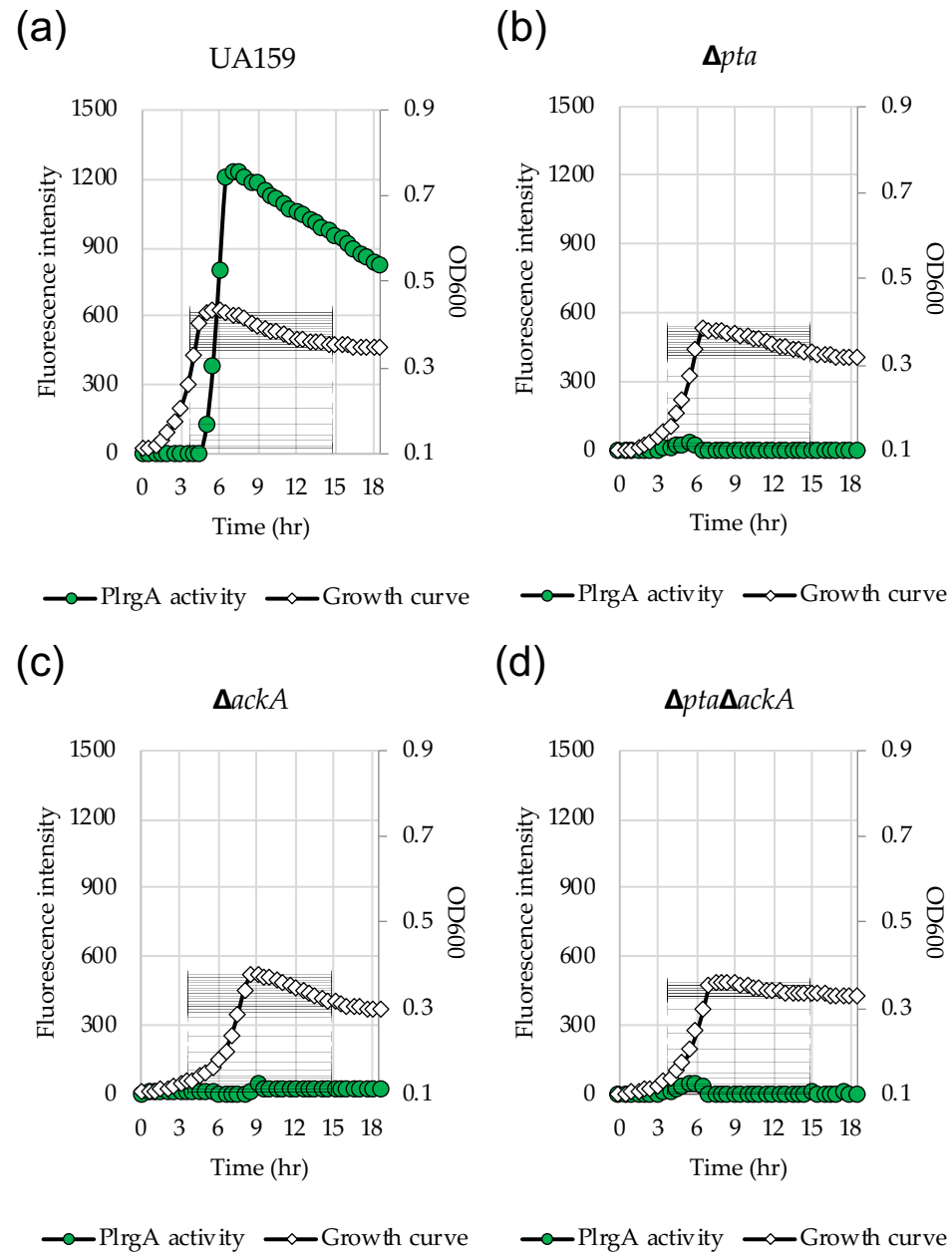


Figure S4. The response of *PlrgA* activity to 1 mM pyruvate in FMC 11 medium by disruption of the Pta-AckA pathway.

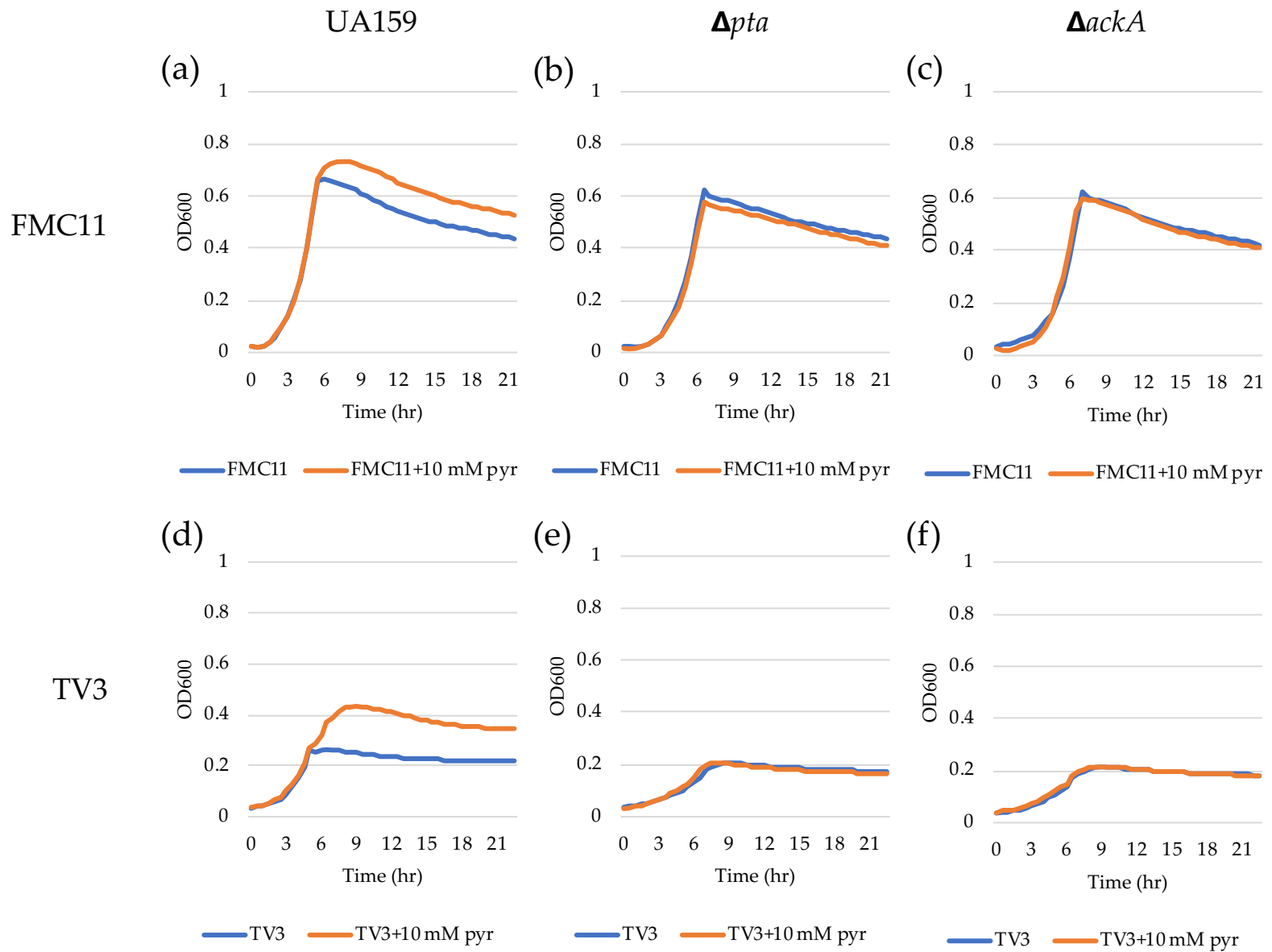


Figure S5. The effect of exogenously added pyruvate on the stationary phase of *S. mutans* UA159 wild type, Δ *pta* and Δ *ackA* strains, grown in FMC11 and TV3.