



**Supplementary figure 2 Time course for growth of *L. lactis* NZ3900 or *Lb. plantarum* TLG02 cultivated without pH regulation.**

Panel A: *L. lactis* NZ3900/pVK51ORF*dkr*; Panel B: *Lb. plantarum*/pSIP603ORF*dkr*; Panel C: *Lb. plantarum*/pSIP609ORF*dkr*. The graph shows OD<sub>600</sub> (triangles down), pH (crosshairs), 2,5-DKG reductase activity (units per liter of fermentation broth) (circles white) and specific activity (units per milligram protein) (circles black).