

Supplementary table 1 Maximum activities of 2,5-DKG reductase measured in cell free extracts of induced and noninduced *L. lactis* and *Lb. plantarum* TLG02 after expression of the complete *dkr* ORF

not pH regulated cultivations of <i>L. lactis</i> and <i>Lb. plantarum</i> ^a					
strain /plasmid	volumetric activity (U L ⁻¹ fermentation broth)		specific activity (U mg ⁻¹ protein)		Induction factor ^b
	induced	noninduced	induced	noninduced	
<i>L. lactis</i> NZ3900/pVK51ORF <i>dkr</i>	44.8 ± 0.58	14.1 ± 1.5	0.111 ± 0.009	0.032 ± 0.002	3.7
<i>Lb. plantarum</i> /pSIP603ORF <i>dkr</i>	43.2 ± 1.8	13.1 ± 0.17	0.114 ± 0.001	0.046 ± 0.003	2.5
<i>Lb. plantarum</i> /pSIP609ORF <i>dkr</i>	47.1 ± 1.6	15.7 ± 0.37	0.152 ± 0.004	0.049 ± 0.001	3.1

pH regulated cultivations (pH 6.5) of <i>L. lactis</i> and <i>Lb. plantarum</i> ^a					
strain /plasmid	volumetric activity (U L ⁻¹ fermentation broth)		specific activity (U mg ⁻¹ protein)		Induction factor ^b
	induced	noninduced	induced	noninduced	
<i>L. lactis</i> NZ3900/pVK51ORF <i>dkr</i>	70.4 ± 7.9	13.8 ± 1.3	0.144 ± 0.009	0.026 ± 0.002	5.5
<i>Lb. plantarum</i> /pSIP603ORF <i>dkr</i>	63.4 ± 0.87	14.4 ± 1.7	0.095 ± 0.002	0.020 ± 0.004	4.8
<i>Lb. plantarum</i> /pSIP609ORF <i>dkr</i>	107 ± 9.3	20.0 ± 0.19	0.168 ± 0.017	0.032 ± 0.002	5.3

^a All data are mean values of three independent experiments. The maximum volumetric and specific activities measured in the culture are presented.

^b The induction factor was defined as the ratio between the specific activity obtained under induced conditions and the activity obtained under noninduced conditions