

Table S1. Primers used in this study

Primers	Sequence (5'-3')	Applications
<i>perR</i> -upF	ATGGATCCGGTAATCTTTTTATGCTC	Deletion of <i>perR</i>
<i>perR</i> -upR	GATACTGAAGGCTAGAGAGG	Deletion of <i>perR</i>
<i>perR</i> -dnF	AAGGATCCAGCAAGAACAAGTGGCTAG	Deletion of <i>perR</i>
<i>perR</i> -dnR	CTCATCGTCACGATCCATGTTTG	Deletion of <i>perR</i>
<i>mntA</i> -upF	ATAAGGATCCAGCAGGCTGCTAG	Deletion of <i>mntA</i>
<i>mntA</i> -upR	CTTCTTGGCTCTGGGGATCA	Deletion of <i>mntA</i>
<i>mntA</i> -dnF	ATAAGGATCCGCTACTACAGCATGATG	Deletion of <i>mntA</i>
<i>mntA</i> -dnR	CGGTGTTGTTTTCGTCCAAGACAAG	Deletion of <i>mntA</i>
<i>perR</i> -com-F	AAGAATTCGTGATAGAAAACCAGCTG	Complementation of <i>perR</i>
<i>perR</i> -com-R	ATATGTCGACCTAGCTAGCCACTTGTTTC	Complementation of <i>perR</i>
<i>mntABC</i> -com-F	AAGAATTCCTTGTCTCACTTTCATAC	Overexpression of <i>mntABC</i>
<i>mntABC</i> -com-R	ATATGTCGACTTATTTAGACAGACCTTCTG	Overexpression of <i>mntABC</i>
<i>PmntABC</i> -BamHI	AATAGGATCCGATAATCCCTGTGATAGTCG	<i>mntABC</i> luciferase reporter
<i>PmntABC</i> -NheI	AATAGCTAGCCAAAGGTAACAGGCTTG	<i>mntABC</i> luciferase reporter
16S-F	AGAGTTTGATCCTGGCTC	qRT-PCR strandard curve of 16S rDNA
16S-R	GATGTTAGGCTTGA CTCTGAC	qRT-PCR strandard curve of 16S rDNA
<i>mntH</i> -F	GGTGGCTCTCACATTGTT	qRT-PCR strandard curve of <i>mntH</i>
<i>mntH</i> -R	CCAAGGATGGAAAGACCT	qRT-PCR strandard curve of <i>mntH</i>
<i>mntA</i> -F	CGTTTCTTAGTTCTGCTTTTG	qRT-PCR strandard curve of <i>mntA</i>
<i>mntA</i> -R	CATAAAGTAGTACGACATCATCG	qRT-PCR strandard curve of <i>mntA</i>
<i>dpr</i> -F	GGAGCAGGCATTTACAGAGGAAC	qRT-PCR strandard curve of <i>dpr</i>
<i>dpr</i> -R	CCAGAGTTAGAAAGAAGAGCATGA	qRT-PCR strandard curve of <i>dpr</i>
q16S -F	CGATACATAGCCGACCTGAGAG	qRT-PCR of 16S rDNA
q16S-R	TCCGTCCATTGCCGAAGATTC	qRT-PCR of 16S rDNA
q <i>mntH</i> -F	GGGATTCTCTGTGCTGCTATC	qRT-PCR of <i>mntH</i>
q <i>mntH</i> -R	GCAACGATGACCGCAATA	qRT-PCR of <i>mntH</i>

<i>qmntA</i> -F	ACATGAATACGAGCCTCTGCCTG	qRT-PCR of <i>mntA</i>
<i>qmntA</i> -R	GCCTCCAAGTAAATCACGTCC	qRT-PCR of <i>mntA</i>
<i>qdpr</i> -F	GAAGATTTCAATCACGCGCTCCAA	qRT-PCR of <i>dpr</i>
<i>qdpr</i> -R	TTATACAGCTCGTATCGCTCTT	qRT-PCR of <i>dpr</i>

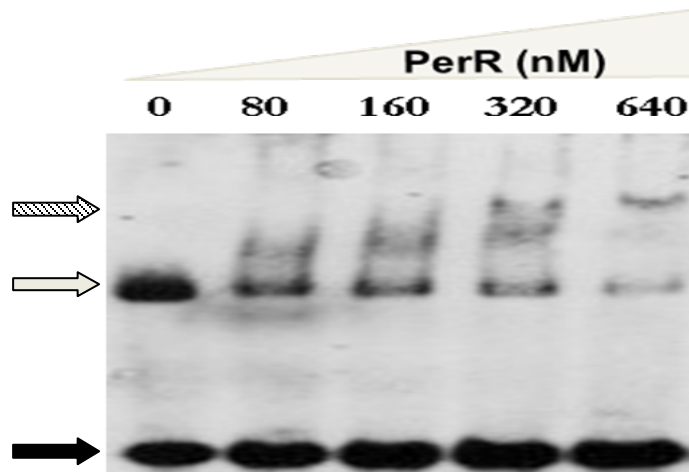


Fig. S1. EMSA detects the binding of GST-PerR protein to *dpr* promoter.

Recombinant GST-PerR protein was overexpressed in *Escherichia coli* BL21(DE3)PLYsS strain and purified as recommended by GE Healthcare. DNA fragment including intact *dpr* promoter (229 bp) was PCR amplified with 5' biotin labeled primers and gel purified. A labeled 50-bp DNA fragment, which contains the putative binding site of the response regulator ComE (*com* box) located in the promoter region of *comC* gene, was included as the negative control. The 20 μ l reaction mixtures contained various concentrations of PerR protein (ranging from 0-640 nM), each of 0.2 nM biotin-labeled *dpr* promoter and *com* box fragment, 20 mM Tris-HCl (pH 8.0), 5% glycerol, 1mM dithiothreitol, 50 mM KCl, 5 mM MnCl₂, 50 μ g/ml BSA, 40 ng/ μ l poly(dI-dC), 1U/ μ l catalase. After incubation for 20 min at 20°C, the reaction mixtures were separated on a 6% polyacrylamide gel. The DNA-protein complex was transferred onto a nylon membrane, and the biotin-labeled DNA was detected by LightShift Chemiluminescent EMSA Kit (Pierce, Rockford, IL). The added PerR concentrations are indicated above the lanes. Shaded arrow indicates

shifted migration position of the PerR-bound promoter fragment; gray arrow indicates the free DNA fragment, and the black arrow indicates the negative-control DNA (*com* box).

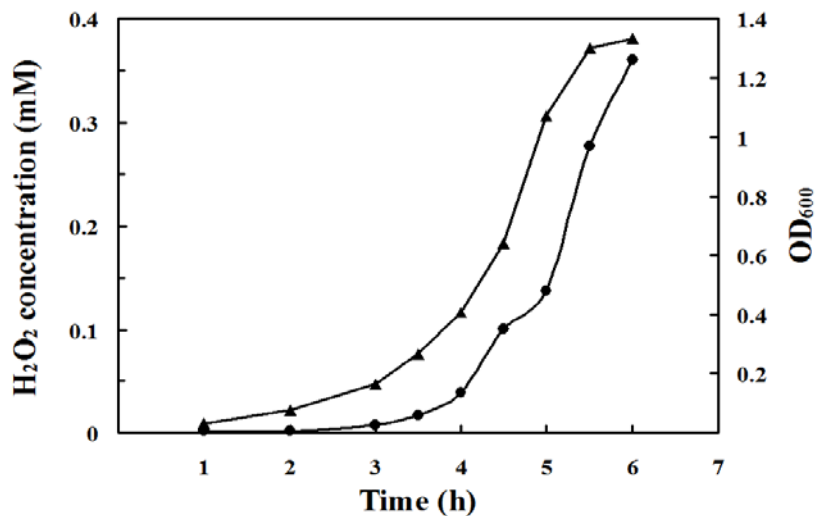


Fig. S2. Hydrogen peroxide production by *Streptococcus oligofermentans* growing statically in BHI culture. Overnight culture of *S. oligofermentans* wild strain was diluted at a 1:40 ratio into fresh BHI medium and incubated statically. Cultures were sampled at the time points shown in the figure, and then optical density at 600 nm and H₂O₂ production were measured as described in “Materials and Methods”. ▲, OD₆₀₀; ●, H₂O₂ concentration. Data are representative of three independent experiments.