



Fig. S1. Determination of transcription units of K^+ uptake system genes of *A. caulinodans* (A) Maps of the *kdpFABC*, *kup*, *trkAI*, and *trkJ* with target regions for RT-PCR analyses. (B) RT-PCR analyses to determine transcription units of *kdpFABC*, *kup*, *trkAI*, and *trkJ*. cDNA was synthesized using total RNA (0.5 μ g) from WT strain grown in a medium containing 0.5 mM K^+ at 38°C. Subsequent PCRs were performed using the cDNAs (c) and WT genomic DNA (1×10^{-1} ng μ l $^{-1}$; g) as templates with the indicated primer pairs.

Table S1. Features of the predicted amino acid sequences encoded by K⁺ uptake system genes of *A. caulinodans* ORS571.

K ⁺ uptake system genes of <i>A. caulinodans</i>		Sequence identity based on blastp program	number of transmembrane regions based on SOSUI program
name	locus tag		
<i>kup</i>	AZC_4041	40% with <i>E. coli</i> Kup (E-value: 3e-148)	12
<i>kdpF</i>	not assigned	69% with <i>Methylobacterium extorquens</i> DM4 KdpF (E-value: 1e-04) 62% with <i>Rhizobium</i> sp. AP16 KdpF (E-value: 2e-04) 62% with <i>Agrobacterium</i> sp. ATCC 31749 KdpF (E-value: 2e-04)	1
<i>kdpA</i>	AZC_1565	53% with <i>E. coli</i> KdpA (E-value: 2e-158)	10
<i>kdpB</i>	AZC_1566	61% with <i>E. coli</i> KdpB (E-value: 0.0)	7
<i>kdpC</i>	AZC_1567	47% with <i>E. coli</i> KdpC (E-value: 1e-32)	1
<i>trkA</i>	AZC_3082	40% with <i>E. coli</i> TrkA (E-value: 6e-104)	0
<i>trkI</i>	AZC_3081	24% with <i>E. coli</i> TrkG (E-value: 9e-11) 26% with <i>E. coli</i> TrkH (E-value: 3e-16)	11
<i>trkJ</i>	AZC_4025	35% with <i>E. coli</i> TrkG (E-value: 3e-76) 34% with <i>E. coli</i> TrkH (E-value: 1e-73)	11