twice with 50 mM Tris-HCl (pH 8.0) buffer, and then suspended in the same buffer. After 1.25 g of glass beads were added per 1.5 mL of the suspension, the cells were disrupted using a bead beater for 6 minutes. Then, the supernatant was recovered by centrifugation (15,000 rpm, 20 minutes), and the concentrations of proteins were quantitated by the Bradford method. For an equal amount of cell extracts, the excited light was irradiated at 488 nm by using a method introduced by Laure Gory *et al*. (*FEMS Microbiology Letters*, 194, 127–133, 2001), and the emitted light at 511 nm was measured using the LS-50B spectrophotometer (Perkin-Elmer), and thus the expression level of the GFP gene was measured. Through the comparison with the GFP gene expression level of the control ATCC13032/pCES_Pgdh_gfp strain, the top three strains with the highest GFP gene expression levels were selected (Table 1).

TABLE 1

Strain	Fluorescence sensitivity
ATCC13032/pCES	0
ATCC13032/pCES_Pgdh_gfp	583
ATCC13032/pCES_Pm3gdh_gfp	1217
ATCC13032/pCES_Pm16gdh_gfp	1205
ATCC13032/pCES_Pm78gdh_gfp	1198

As shown in Table 1 above, the Pm3gdh, Pm16gdh, and Pm78gdh promoters showed promoter activity in *Corynebacterium glutamicum*, and also showed higher fluorescence sensitivity than the wild-type gdh promoter. In order to investigate the mutation introduced into the gdh promoters of the four types of strains selected above, the gdh promoter mutants were sequenced. After PCR was performed using the primers of SEQ ID NO: 9 and SEQ ID NO: 10 to determine sequences, sequencing was performed. A comparison with the sequence of SEQ ID NO: 1, which is the wild-type gdh promoter sequence, was