

SEQUENCE LISTING

<110> KANEKA CORPORATION

<120> METHOD FOR PRODUCING L-AMINO ACID

<130> B080588WO01

<140> PCT/JP2009/068515

<141> 2009-10-28

<150> JP2008-277674

<151> 2008-10-29

<160> 3

<170> PatentIn version 3.1

<210> 1

<211> 1170

<212> DNA

<213> Geobacillus kaustophilus

<400> 1

```

atgaaagaaa ttgttcagca gatgaaggcg gagctatggg agattttcga tcaccttcat    60
cgccatccag aaatcagttg ggaagagtgg caaacgaccg aattttctcg gcgggagttg    120
gagcgcgaa ggtatcggtt gcggacgttt gccgattgtc cgggcgtggt ggcagaaatc    180
ggcgccggcc cgtttacggt cggggtgcgc agcgatatgg acgccctttg gcaagaagtg    240
aacggcgttt ggcagccgaa ccatgcgtgc gggcatgacg cccatatgac gatcgtgtc    300
ggggtggcga aactgcttcg ccgcateggc tatgagccgc cggggacgct geggtttttg    360

```

ttccagccgg ccgaggagaa aggaacaggg gcgttaaagc tgatcgaaaa aggggcggtt 420
 gacggcggtg cgtttttata cggcattcat ctgcggccga ttcaagaagt gaaagcgga 480
 tatcgggcgc cggcgatcat ccatggggcg gcgcaatgca tcgaaggcg gattcgggc 540
 gtggggcac atgccgcgc gccgcattta ggcgtcaacg tcattgaagt cggcagcgcc 600
 attgtccaag agtcggcaa aattcatatc gaccacaag tgccagcgtc gatcaaatg 660
 acgaagtffc acgccgtga aaaagatgcg aacacgatcc cggactacgc ggagtttgcc 720
 cttgatttgc gggcgcaaac gaacgaggcg atggagcggc tcgtcgaggg gttgcgcat 780
 gtgatcaacg gggtcgctgc gatttacgga gctgatatg agcttggtga gcggacgcgc 840
 atcgtcgctg ctgacctga tccagatgct gtgcggctga tggaggaggc gattatcacg 900
 actttgggga cggaaaaatg cgttcgcgcg gtcgtgacgt cgggaggaga ggatttccat 960
 ttttatcct ttaagaaacc ggagctgaaa acaacgatgc tcggattggg ctgcgacttg 1020
 cgtccgggga tccatcccc gaacatgacg ttccggcgcg atgatttgc ttctggcgtg 1080
 gaaattttgg cgcgggttgt gatgaacaca ttgcgacgt ttgcgcgca gggggagaac 1140
 gagcgtgcct ctgtcgctgc aaatcattga 1170

<210> 2

<211> 1128

<212> DNA

<213> Geobacillus kaustophilus

<400> 2

atggcgatca acatcgagta cgtcatattg cgccatttgc aaatggagtt gaaggcgccg 60

ttacaaacga gctttggcac gtttcaaacg aaagagtta ttttagtga agtcgtggat 120
 tgcgacgcg tttccggctg gggcgaatcg gtcgcgttt cgcgccatg gtacagcgag 180
 gaaacgggtga aaacgaactg gcataigctt gaagagtttc tcgtgccgct ctgttttcg 240
 aagccgctta ggcacccagc ggaattgccg gagcgctttg ccgccatccg ccaaaacaac 300
 atggcgaaag cggcgcttga gggagcggta tgggatttgt atccaagcg gcttggcgtt 360
 ccgctttgtc aagctctcgg gggaacgaaa aaggaaattg aagtcggcgt cagcatcggc 420
 atccagccga cggtcgacga tctgcttcag gtgattgagc ggtatgtggc gcaagggtac 480
 cggcggtatca aagtgaagat caaacggga tgggatgttg atgtcattcg cgacgtcggg 540
 cgcgcgtttc ctgacgtgcc gctcatggcg gatgccatt ccgcgtatac gctcgtgac 600
 gccaaagcgc ttcaggcgct tgatgaattt gggctgatga tgatcgaaca gccgctcgcc 660
 gctgacgac tigtgatca cgcgggctg cagccgcttc ttaagacgcc gatttcctt 720
 gatgaaagea ttcttcata tgacgatcg cgcaaggcgc ttgaccttg cagctgccg 780
 atcatcaaca tcaaaatcgg gcgcgtcgcc gggctttggg aggcgaagcg catccaagat 840
 ctttgcgtg agcgaggcgt tccggtctgg tgcgggggga tgcgtgaagc aggggtcggg 900
 cgcgccaca atattgcgat cagcagctt gaaaacttcg cgttcccg cgacaccgc 960
 gcgltccc attattggga gcgggatatt atcacgccg aagtcgaggt gcacaacggc 1020
 ttgacccg cgccgaacgc cccgggcac ggctatgacg tcgacgcgc ccaagttgag 1080
 cggatatacg agtttgcga gttgttccat cgtacggcga cggcataa 1128

<210> 3

<211> I110

<212> DNA

<213> *Thermus thermophilus*

<400> 3

atgcgtagtag agggggccga gctcaggatt ttggagettc cctgaagtt ccgctttgag	60
acgagettcg ggggtgcagac caagaggacc atcctctctc taaggctctt cggggagggc	120
ctggagggcc tgggggaagg ggtgatggag cgcttcccc tctaccggga ggagacggtg	180
gcggggggcca ggtacctctt ggaagaggtc ttctgcccc gggctctggg gcgggaacct	240
cccaaccccg aggcctaag ggaggccctt gcccctctc ggggcaacc catggccaag	300
gcggtcttgg agatggctt ctttgacctc tgggccaagg ccttggggag gccgctttgg	360
caggctctgg gcgggggtcg gcaggcggg gaggtggggg tctcctggg gatccagccc	420
tcggtggagg acacgcttag ggttgtggag cggcacctcg aggagggcta ccgcccgcac	480
aagctcaaga tcaagccggg ctgggactac gaggtcctga aggcggtgcg agaggccttc	540
cccaggcca cctcacgcg cgaagccaac agcgctata gcctcgcaa cctcgcccag	600
ctcaagcgcc tggacgagct ccggtggac tacatagagc agccctggc ctacgacgac	660
ctctggacc acgccaagct ccagcgggag ctttcaccc ccatctgctt ggaagagagc	720
ctcacggggg cggagaaggc gaggaaggcc attgagcttg gggcggggcg ggtcttcaac	780
gtcaagcccg cccgcctcgg cggccacggg gagagcctcc gggtcacgc cctggcggag	840

agcgccggga tccccctctg gatggggggg atgctggagg cgggggtggg gagggccac 900

aacctccacc tggcgacctt tccgggttc accaagecgg gggacgtgag ctggcgagc 960

cgctactggg aggaggacat cgtggaggag gccctcgagg ccaaggacgg cctcatgcc 1020

gtgccggaag gcgtgggcat cgggggtccac ctgaagcttc ccttcgtgga gcgggtcac 1080

ctatggcaga ggtacatgtc cgcgagctaa 1110