

Fig. 1

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51  LRVNPVSGSAKTVFQVPEIVSDADGQNGLLGFAFHPDFKNNPYIYISGTF 100

101  KNPKSTDKELPNQTIIRRYTYNKSTDTLEKPVDLLAGLPSSKDHQSGRLV 150
101  KNPKSTDKELPNQTIIRRYTYNKTTDTFEKPIDLIAGLPSSKDHQSGRLV 150

151  IGPDQKIYYTIGDQGRNQLAYLFLPNQAQHTPTQQELNGKDYHTYMGKVL 200
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201  RLNLDSGSIKDNPSFNGVVSIIYTLGHRNPQGLAFTPNGKLLQSEQGPNS 250
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251  DDEINLVLKGGNYGWPNAVAGYKDDSGYAYANYSAATNKSQIKDLAQNGIK 300

300  VAAGVPVTKESEWTGKNFVPLKTLTYTVQDTYNYNDPTCGEMTYICWPTV 349
301  VATGVPVTKESEWTGKNFVPLKTLTYTVQDTYNYNDPTCGEMAYICWPTV 350

350  APSAYVYVYGGGKKAITGWENTLLVPSLKRGVIFRIKLDPTYSTTYDDAVP 399
351  APSAYVYVYGGGKKAIPGWENTLLVPSLKRGVIFRIKLDPTYSTTLDDAIP 400

400  MFKSNRNRYRDVIASPDGNVLYVLTDTAGNVQKDDGSVTNTLENPGSLIKF 449
401  MFKSNRNRYRDVIASPEGNTLYVLTDTAGNVQKDDGSVTHLTLENPGSLIKF 450

450  TYKAK 454
451  TYNGK 455

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Fig. 2

Schematic diagram of the plasmide with gene for s-GDH (pACSGDH)

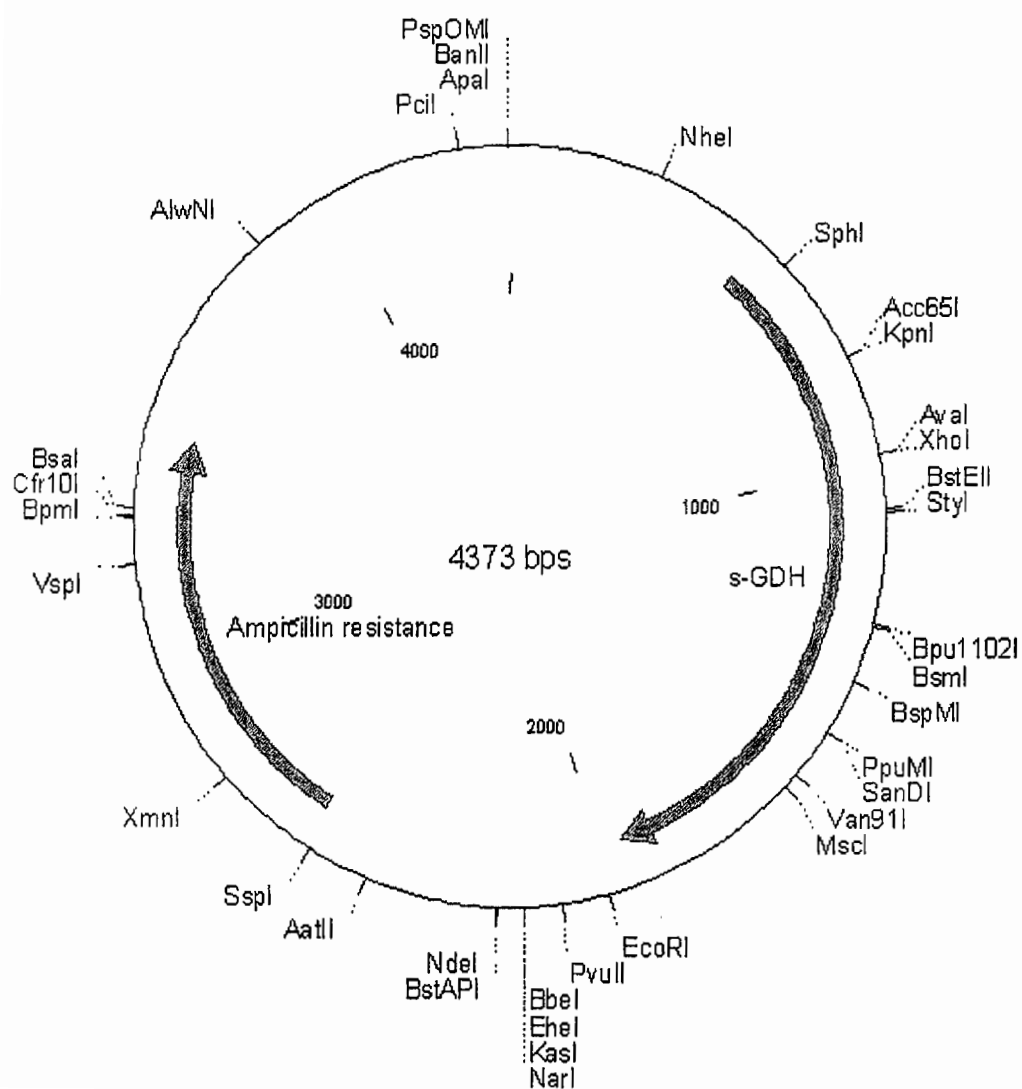


Fig. 3a

Sequence vector pACSGDH

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```

Fig. 3b

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SEQUENCE LISTING

<110> Roche Diagnostics GmbH
 F. Hoffmann-La Roche AG

<120> Genetically engineered pyrroloquinoline quinone dependent glucose
 dehydrogenase comprising an amino acid insertion

<130> 22669 WO

<150> EP 04017069
 <151> 2004-07-20

<160> 11

<170> PatentIn version 3.2

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Lys Ile Leu Arg Val Asn Pro Glu Ser Gly Ser Val Lys Thr Val Phe	
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cag gta cca gag att gtc aat gat gct gat ggg cag aat ggt tta tta	240
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85 90 95	
tca ggt aca ttt aaa aat ccg aaa tct aca gat aaa gaa tta ccg aac	336
Ser Gly Thr Phe Lys Asn Pro Lys Ser Thr Asp Lys Glu Leu Pro Asn	
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Glu Lys Pro Val Asp Leu Leu Ala Gly Leu Pro Ser Ser Lys Asp His	
130 135 140	
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Gln Ser Gly Arg Leu Val Ile Gly Pro Asp Gln Lys Ile Tyr Tyr Thr	
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Pro Lys Asp Asn Pro Ser Phe Asn Gly Val Val Ser His Ile Tyr Thr	
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Lys Ile Leu Arg Val Asn Pro Glu Ser Gly Ser Val Lys Thr Val Phe
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Lys Leu Asp Pro Thr Tyr Ser Thr Thr Tyr Asp Asp Ala Val Pro Met
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