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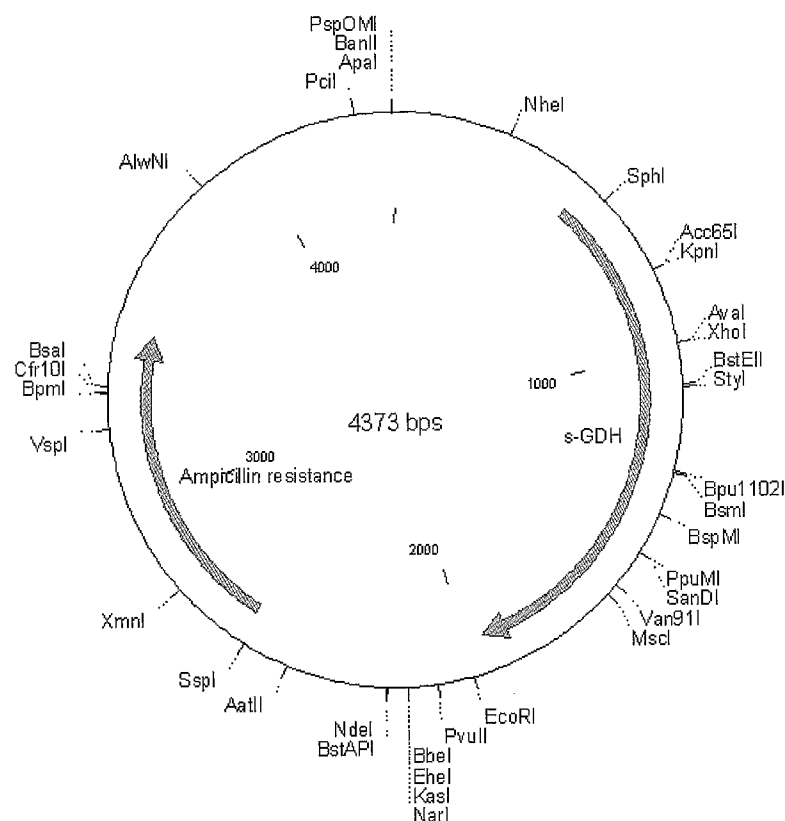
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(54) Title: GENETICALLY ENGINEERED PYRROLOQUINOLINE QUINONE DEPENDENT GLUCOSE DEHYDROGENASE COMPRISING AN AMINO ACID INSERTION

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



(57) Abstract: The present invention relates to improved variants of soluble pyrroloquinoline quinone (PQQ)-dependent glucose dehydrogenases (s-GDH) comprising an amino acid insertion between positions 428 and 429 as corresponding to the amino acid sequence known from *Acinetobacter calcoaceticus*, to genes encoding such variant s-GDH, to proteins of such s-GDH variants with improved substrate specificity for glucose, and to different applications of these s-GDH variants, particularly for determining concentrations of sugars, especially of glucose in a sample.



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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,

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