

兽医—研究报告

不同种冷冻保护剂嗜酸乳杆菌保存效果的比较研究

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摘要:

在相同的时间内,比较不同的冷冻保护剂配制和不同冷冻条件对嗜酸乳杆菌的保存效果。应用冷冻和低温冷冻2种冻存方法,于预定时间,分别对预设的7个不同冷冻保护剂进行复苏以及相关检测。冷冻保护剂分组为:DMSO-脱脂乳(1:9)、DMSO-液体MRS(1:9)、甘油-脱脂乳(1:1)、甘油-脱脂乳(8:2)、甘油-生理盐水(1:1)、甘油-液体MRS(1:1)、甘油-液体MRS(8:2)。试验结果显示:-80℃的试验组的嗜酸乳杆菌存活量大于除温度外同等条件下-20℃组的存活量。采用DMSO为冷冻保护剂、脱脂乳或液体MRS为冷冻介质的试验组的菌存活量明显大于其他试验组。本试验分组内,-80℃条件下,DMSO作为冷冻保护剂,冷冻介质为脱脂乳或液体MRS时,试验组的菌存活量明显大于其他试验组。

关键词: DMSO

Effect of Preservation on Lactobacillus acidophilus by Different Cryoprotectants

Abstract:

The same strain of Lactobacillus acidophilus(LA) were conservation by the different cryoprotectant and temperature, then take them a comparison in the time we preset. The groups of cryoprotectant we predetermined is that: DMSO-skimmed milk(1:9), DMSO-liquid MRS(1:9), glycerinum-skimmed milk(1:1), glycerinum-skimmed milk(8:2), glycerinum-normal saline(1:1), glycerinum-liquid MRS(1:1) and glycerinum-liquid MRS(8:2). With the extension of the conservation, the survival amount of the bacterial in the -80℃ group was more than that in the -20℃ group. The groups that had more number of survivorship of the Lactobacillus acidophilus than others had some denominators were that they had DMSO as cryoprotectant, skimmed milk or liquid MRS as preservation medium. The amount of survival LA was larger in this group than other groups, that was DMSO as cryoprotectant and with preservation medium as skimmed milk or liquid MRS.

Keywords: DMSO

收稿日期 2010-07-01 修回日期 2010-08-12 网络版发布日期 2011-03-25

DOI:

基金项目:

乳酸菌及其代谢产物调控靶细胞抗损伤机理的研究

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