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BABS UNSW iGEM Lab Protocol



Procedure	Name		Preparation of pre-treating solution for lactococcus electrotransformation (100ml)			
	Description		Use of this solution has been shown to significantly improve efficiency of transformation by Papagianni, et al (2007)			
Document	Name	Mackenzie Labine-Romain	Date	8/07/15	Version	2
Requirements	Time					
	PPE		Gloves, Labcoat			
	Equipment		Scales Magnetic Mixer 0.1 L Schott bottle			
	Materials		Tris-HCl 7.5 0.66g Lithium acetate 20.5 g Sucrose 0.7g DTT (dithiothreitol)			
Step 1	Add 0.66g lithium acetate and 20.5 g sucrose to Schott bottle and dissolve in 50ml water.					
Step 2	Mix with the magnetic mixer until fully dissolved,					
Step 3	Prepare 1M DTT by dissolving 0.154g DTT in 1mL Milli-Q water in a microcentrifuge tube. Shake to mix.					
Step 4	Add 1ml DTT solution and 1ml of Tris-HCl to Schott bottle and mix. Add Milli-Q water up to 100mL.					
Step 5	Filter sterilise in hood.					
Notes	Adapted from: Papagianni, M., Avramidis, N., & Filioussis, G. (2007). High efficiency electrotransformation of <i>Lactococcus lactis</i> spp. <i>lactis</i> cells pretreated with lithium acetate and dithiothreitol. <i>BMC biotechnology</i> , 7(1), 15.					
Version History	Sucrose volume changed					