



University of Melbourne iGEM 2014 Lab Procedure

Procedure	Name:	Measuring OD		
	Version:	1		
	Description:	Measuring optical density of culture using the NanoDrop spectrophotometer Measuring OD Video		
	Trigger:	Use this procedure when growing E. coli cultures to a specified density		
Last updated	Name:	Robyn Esterbauer	Date:	22/06/2014
You will need	Time:	5 minutes		
	PPE:	Gloves Lab coat Safety glasses		
	Equipment:	NanoDrop spectrophotometer and attached PC		
	Materials:	UV cuvats Blank culture sample taken at the start of procedure, before incubation of the culture Culture sample taken after incubation		
Note	There are only a few people who have login access to the NanoDrop PC. Ask around if it is not logged in.			
Step 1	<p>On the computer:</p> <ul style="list-style-type: none"> • Open the NanoDrop program by clicking the NanoDrop icon on the desktop • Select “Cell Cultures” • Click OK • Check that the wavelength is set to 600nm 			
Step 2	<p>In the NanoDrop:</p> <ul style="list-style-type: none"> • Insert the blank cuvat into the NanoDrop spectrophotometer, lining up the arrow on the cuvat with the arrow on the NanoDrop. • Close the lid 			
Step 3	<p>On the computer:</p> <ul style="list-style-type: none"> • Press the Blank button 			
Step 4	<p>In the NanoDrop:</p> <ul style="list-style-type: none"> • Remove the blank • Insert the sample cuvat, lining up the arrows • Close the lid 			
Step 5	<p>On the computer:</p> <ul style="list-style-type: none"> • Enter the sample name, including the batch ID and time sample taken • eg. BL21 pmk mag1 at 15 min • Press the Measure button • Write down the reading (you don't need to save it) 			
Step 6	When you have measured all your samples, remove the last sample from the machine. If you will be returning with more samples later, leave the computer logged in so it will be ready.			
Step 7	Repeat this procedure with samples taken at specified time intervals until the culture reaches the required OD.			

Version history

Describe the changes made in each new version of the protocol here.