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# Optical density measurement for Bacterial solution (Worm Food)

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Behavioural Genomics



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**Protocol status:** Working

**We use this protocol and it's working**

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## Abstract

Before the OP50 solution is aliquoted into small falcon tubes, it is always better to check the OD by using a spectrophotometer, for documentation purposes.

## 1 **Pre-measurement**

1. Clean the disposable cuvettes with ethanol and lint free paper
2. Aliquot small amount of LB broth into a falcon tube (For Blank)
3. Fill about 1ml of the LB broth into a clean cuvette
4. Mix/Vortex the tube containing the stock bacteria to achieve a homogenized solution
5. Take three aliquots from the same tube in three different cuvettes

## 2 **Actual measurement**

1. Switch on the spectrophotometer
2. Press the bottom left button to select the OD program
3. Increase the wavelength to 600nm
4. Put the blank cuvette first and press the button showing blank
5. Put the sample cuvette 1 and press the button showing sample
6. Take a note of the OD reading
7. Place the second sample and repeat
8. After taking readings for all three samples take the average
9. Record the OD as  $OD_{600} = 1.35$

## 3 **Post measurement**

1. Discard the cuvettes
2. Close the lid to the spectrophotometer
3. Switch it OFF