

Directions For Use:

Starter Kit

1. What is a PCT Starter Kit?

The PCT Starter Kit is created to introduce beginners and hobbyists to the basics of Plant Tissue Culturing. The kit contains the basic materials that culturists (like YOU) will require to get started. The best part is that you don't have to shop around for individual products. **The Starter Kit is best for beginners** who are often confused about the materials they require to initiate the process of preparing suitable media for their cultures.

2. What does it contain?

The Kit is equipped with the following items:

- 3 glass culture vessels of 250 ml
- 50 grams of Agar
- 10 ml of PPM
- 1 Bottle of MS salt (22.7 grams)

3. How can it be used?

You can prepare the growth media by using the steps given below:

For **1 liter of media**, you need:

- 4.54 g of MS salts
- 20-30 g of sucrose
- 6-10 g of Agar
- 1-2 ml of PPM
- pH: 5.4-5.8



Directions For Use:

Starter Kit

Steps to prepare 1L media

1. Pour the sterile distilled or RO water into your mixing container (like the Erlenmeyer flask).
2. To prepare 1 L of media you need 4.54 grams of MS salt. Is recommended to use a scale with at least two decimal places.
3. Then add 20-30 grams of sugar (depending on the plant) in the same mixing container with continuous stirring.
4. Add 2 ml/L plant preservative mixture (PPM).
5. Then, calibrate the pH of the media to 5.4-5.8 using 1N HCL/ 1N NaOH/ 1N KOH. (You can also use vinegar to decrease or baking soda to increase the pH).
6. Add 8-10 grams of agar to the prepared media by continuous stirring.
7. Then, pour the media into your culture vessel.

4. How many batches can be done using the Kit?

If you want to only use the three culture vessels included in the kit, we recommend making **100 ml of media**. In 100 ml media increments, you will 50 batches, 5 liters (5,000 ml) divided by 100 ml is 50 batches.

For **100 ml of media**, you need:

1. 0.454 g of MS salts
2. 2-3 g of sucrose
3. 0.6-1 g of Agar
4. 0.1-0.2 ml of PPM
5. pH: 5.4-5.8

After this, follow the same steps as given in the preparation of 1 L of media. Then, place your explant in the media and incubate your cultures in a suitable environment for their proper growth.

Plant Cell Technology has also created [videos](#) and blogs to help you out with the Starter Kit. So, visit our [website](#) to get all the tissue culture information you need!

Happy Culturing!

www.plantcelltechnology.com

202-621-5490

1601 Connecticut Ave NW suite 400
Washington DC, 20009

