

Agar Frogs Protocol

Materials (for 6 large frogs):

300 ml tap H ₂ O	6 pre-programmed ibuttons	1 Whisk or Spatula	1L Pyrex measuring cup
10 g agar	3 Weigh Boats	Scissors	Digital Scale
5 g pigment	Ball of cotton twine (string)	Duct Tape for labeling	Microwave
Agar frog mold			

Protocol:

1. Cut a piece of string ~30cm.
2. Tie the string around the center of the ibutton and secure the string to the ibutton with a small piece of duct tape. **NOTE:** Keep the tape on the thin, rounded edge of the ibutton and not on the flat face so as not to hinder the sensor.
3. Obtain the agar frog mold. We need to place the ibutton in position on the mold before pouring the liquid agar mixture onto the mold. To do this, suspend the ibutton directly above one of the empty frog bodies in the mold. Stretch the string connected to the ibutton across the mold and secure the ends of the string to the table that the mold is set upon. Make sure the ibutton hangs in the center and does not touch the sides of the mold. See Figure 1 to the right.
4. Mix 10 g agar, 5 g of desired colored pigment and 300 mL tap water in the Pyrex measuring cup. Stir briskly with the whisk to ensure the powders are completely dissolved.
5. Using the microwave, heat the mixture in the Pyrex cup for ONE MINUTE.
6. Remove the Pyrex cup and stir well with the whisk.
7. Using the microwave, heat the mixture in the Pyrex cup again, this time for 30 SECONDS. **NOTE:** At some point, expect the mixture to boil vigorously towards the top of the container. If you notice the mixture starting to boil and filling the Pyrex cup, STOP the microwave and carefully remove the cup. Your mixture is ready to pour into the molds. Repeat step 7 until the liquid begins to boil.
8. Stir very thoroughly and pour into molds. Be sure to *completely* cover the ibutton. See Figure 2 to the right.
9. Let cool completely at room temperature before removing frogs from mold (about 1 hour and 15 minutes).

Figure 1

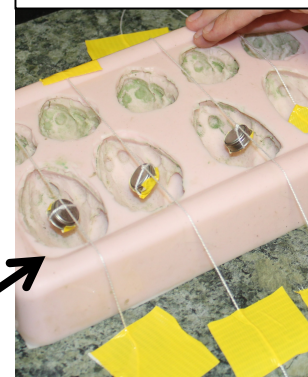


Figure 2

