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BrainSaw 50 mM pH 7.4 PB slicing buffer

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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocol makes 2L of pH 7.4 phosphate buffer. This solution is used for serial section 2-photon imaging.

Materials

2 L GL45 bottle


Sodium phosphate monobasic monohydrate S23120-1000.0 1 kg (CAS 10049-21-5).

Sodium phosphate dibasic heptahydrate 5 kg

magnetic stirrer

weighing scales

Protocol materials







 Sodium phosphate monobasic monohydrate **Catalog #S23120-1000.0** In [2 steps](#)

 Sodium phosphate dibasic heptahydrate **Melford Catalog #S23175-5000.0** In [2 steps](#)

Safety warnings

- ⚠ Ensure the first solute is completely dissolved before adding the second. Not doing this will result in a small quantity of fine precipitate being formed.



- 1 Fill 2L flask with MQ water to the 2L notch. Place on magnetic stirrer and set to 1000 RPM.
- 2 Weigh  3.1 g of  Sodium Phosphate Monobasic Monohydrate **Melford Catalog #S23120-1000.0** and pour into the flask.
- 3 Weigh out  20.8 g of  Sodium phosphate dibasic heptahydrate **Melford Catalog #S23175-5000.0** but do not pour into flask until existing solute is dissolved.
- 4 Wait until  Sodium Phosphate Monobasic Monohydrate **Melford Catalog #S23120-1000.0** has dissolved. Skipping this step will result in a small quantity of fine precipitate being formed.
- 5 Pour  Sodium phosphate dibasic heptahydrate **Melford Catalog #S23175-5000.0** weighed out above into flask. Screw on lid and shake once to ensure no solute is stuck around the rim of the flask. Return to stirring plate at 1000 RPM.
- 6 Use PB once all solute is dissolved. Do not refrigerate: cold PB will form bubbles as it warms and this interferes with imaging.



5m



10m