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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 monohydrateS23120-1000.0 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

Sodium phosphate dibasic heptahydrate **Melford Catalog #**S23175-5000.0

Sodium phosphate monobasic monohydrate **Catalog #**S23120-1000.0

Sodium phosphate dibasic heptahydrate **Melford Catalog #**S23175-5000.0

Troubleshooting

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 **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 **Catalog #**S23120-1000.0 has dissolved. Skipping this step will result in a small quantity of fine precipitate being formed. 5m

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. 10m

6 Use PB once all solute is dissolved. Do not refrigerate: cold PB will form bubbles as it warms and this interferes with imaging.