

ScienceBridge Tech Site Standard Operating Procedure

<b>Title: How to Make a Reagent Sticker SOP</b>		
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Scope	For use by biotechnology students at Mira Mesa High School when completing an enzyme and/or ocean acidification SOP that requires the use of a reagent sticker			
Objective	This SOP sets the procedural specifications for how to fill out a reagent sticker and what information is expected to be on it.			
Consumable Materials (or ends up in kits)		1 kit	Bottle/ Bag	Outer Packagi ng
	1. Solution Bottle or Bag of Aliquoted Solutions	-	1	1
	2. Reagent sticker	-	1	1
Equipment	1. Ultra Fine Sharpie	1	1	1
	2. New solution or aliquoted reagent	-	varies	
Supplemental Aids	<ul style="list-style-type: none"> <li>• <a href="#">SA Reagent Sticker Labeling video</a></li> <li>• <a href="#">Finding solution tracking numbers video</a></li> <li>• Making Solutions Tracking Sheet</li> <li>• Media Batch Production Record</li> <li>• Batch Production Record</li> <li>• Batch Production Record SOP</li> <li>• Various Aliquoting/Making Solutions SOP</li> </ul>			
Safety	<ul style="list-style-type: none"> <li>• Be sure to read the SOP for any solution to check the relevant safety information of solutions being packaged and are in current use. Be sure safety information is added to reagent labels.</li> </ul>			
Quantity	Prepare 1 reagent sticker per completed <ul style="list-style-type: none"> <li>• aliquoted bag of solutions</li> <li>• bottle of made solution or media</li> <li>• sleeve of poured media</li> </ul>			
Protocol	<p><b>Note there are different protocols for making labels for new stock solutions and for aliquoting solutions. Be sure to follow the correct protocol below</b></p> <p><b>How to label for new stock (Making solutions):</b></p> <ol style="list-style-type: none"> <li>1. Ensure required volume of solution is met for finished bottle, and closed solution is either written on tape and stuck to the bottle or written on the reagent sticker itself, for bottle.</li> <li>2. Obtain yellow reagent sticker (found in room next to fume hood) and ultra fine sharpie.</li> </ol>			

3. Under their respective sections, label the following using the information from your SOP and making solutions tracking sheet.
  - a. Concentration followed by name of solution (including concentration both in name of solution and section for concentration)
  - b. Date prepared
  - c. Your initials/name
  - d. Temperature for storage (e.g. 4°C for fridge, -20°C for freezer)
  - e. Solution tracking number

If applicable, include the following additional information:

  - i. Warnings/hazards (from Safety Data Sheet/SOP)
  - ii. Special storage conditions (e.g. flammable)
  - ii. Formula
  - v. pH

On stock solutions, make sure to leave quantity blank to avoid confusion.

**REAGENT**

Name: IX Elution Buffer

Lot# M181 Part# 8.06

Conc IX Ph 8.06

Quantity AP, DT 3/15/25

Prep. By Room temp Date

Store At Exp.

Example:

4. Apply 1 completed sticker to each bottle.
- 5. Double check that sticker information matches the tracking sheet and that all information on the tracking sheet has been filled out and that solution has passed QC.**
6. Place labeled solutions in the correct storage closed stock location.

#### How to label for when aliquoting reagents and solutions (aliquoting stock):

1. Obtain solution, aliquot appropriate amount into the new container, and QC as specified in the SOP being used.
2. Obtain yellow reagent sticker (found in room next to fume hood) and ultra fine sharpie.

	<p>3. Under each field on new reagent sticker, copy exact information over from reagent sticker on previous container you took solution from with the following changes:</p> <ol style="list-style-type: none"> <li>Update the date to current aliquot date.</li> <li>Under quantity put the packaged amount. Note this should be per tube and per package. Example: 35 g salt/tube, 50 tubes</li> </ol> <p>4. Place 1 new labeled reagent sticker in the upper right hand corner of each outer bag of the aliquoted solution or reagent.</p> <p><b>5. Double check that sticker information matches the batch production record and SOP and that all information on the tracking sheet has been filled out and that solution has passed QC.</b></p> <p>6. Place QC'd solutions in the correct ready for bagging location.</p> <p>*Note that when aliquoting from 50 mL conical tubes, they should be labeled with name of solution, but also M# source for tracking purposes.</p>
Documentation	<ul style="list-style-type: none"> <li>Fill out Batch Production Record. Must be completed and approved by tech site teacher before you are officially finished.</li> <li><b>Solutions Tracking Sheet in Solutions and Aliquots binder</b></li> <li>If mistakes are made while labeling reagent sticker, get a new one and restart</li> <li>(who do you need to inform &amp; what information, include what document/tracking log to fill out)</li> </ul>
Storage	<p><b>Product Storage</b></p> <ul style="list-style-type: none"> <li><b>All completed jobs that required a reagent sticker should go into their appropriate cabinet (ex: ocean acidification or enzymes)</b></li> <li><b>When done with reagent stickers, store back where originally found, in the back room</b></li> </ul> <p><b>Supplies Storage Locations</b></p> <ul style="list-style-type: none"> <li><b>All reagent stickers should be stored in the back room near the fume hood.</b></li> <li><b>Sharpies should be found on the front class counter</b></li> </ul>
Quality Control	<p><b>Fails QC:</b></p> <ul style="list-style-type: none"> <li>If information is not consistent after double checking new sticker with original (i.e. reagent sticker on aliquoted solution does not match reagent sticker on the stock solution), obtain a new sticker and fill out the information again.</li> <li>Can double check information on original making solutions tracking sheet if you have the M#</li> </ul>
Reagent Label Sticker or other Identification Label	<p>Reagent Label Must Include:</p> <ul style="list-style-type: none"> <li>Concentration of the Solution (e.g. 1X, 10X)</li> <li>Name of Solution (e.g. Elution buffer, L-DOPA)</li> <li>Storage Temperature (room temperature, 37°C)</li> <li>Date prepared</li> </ul>

	<ul style="list-style-type: none"> <li>• Name/Initials of preparer</li> <li>• Hazards and special storage if any, check with Safety Data Sheet for hazards, and list storage temperature or other conditions if necessary.</li> <li>• Making Solution Tracking Number</li> <li>• Closed or Open Stock</li> </ul>
When	Filled out when aliquoting solutions/chemicals and when transferring larger volume of solutions into smaller containers
Tech Site Kit: <i>Group</i>	Ocean Acidification, Enzymes, Bacterial Transformation, and Protein Purification: <i>Solutions and Aliquots</i>