

# Pippin Prep™ DNA Size Selection System

## User-installable Elution Module Closures for Extending Elution Range Without Overflow

### Summary

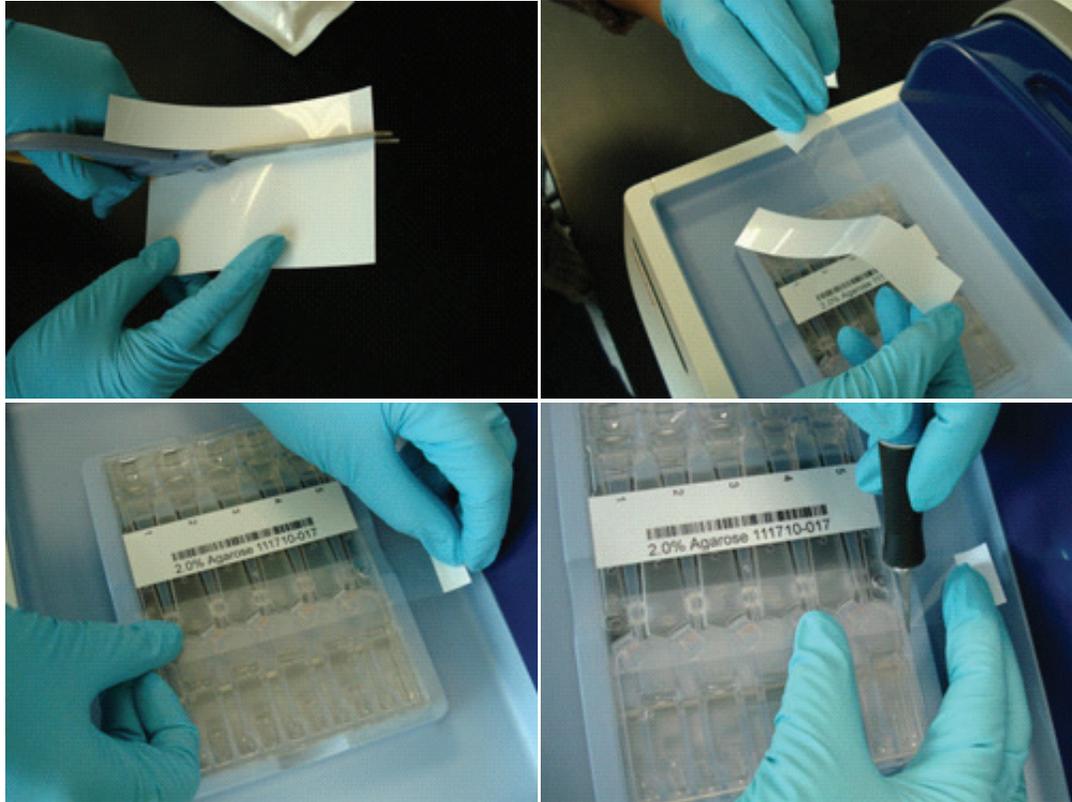
We are in the process of developing a new tape seal for the elution ports on our cassettes. This will allow collection of extended elution ranges in a fixed elution volume, without the elution overflow concerns of our current product. We plan to be producing cassettes with the new seals by the end of Q'1, 2011. Below, we describe a user-installable version of the new seals, for those users with urgent need of broad collections.

### Procedure

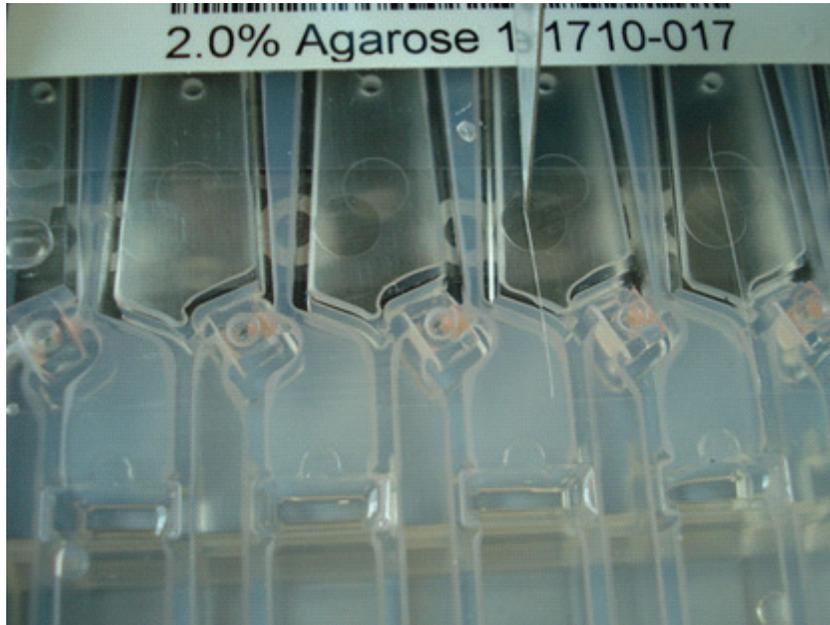
1. Open cassette package, perform visual QC for optical bubbles and dislodge bubbles behind elution module (as described in the user guide). Place cassette in the instrument nest, and remove cassette seals.



2. Using a pipettor, completely remove the contents of the elution modules and refill them with electrophoresis buffer to the desired elution volume. Volumes between 40 and 60 microliters can be used. However, elution volumes below 40 microliters will NOT give reliable results. Perform a current test to ensure that all channel currents are within acceptable range (see user guide).
3. Take a sheet of adhesive PCR plate-sealing film and cut a 2cm wide strip wide enough to extend from side-to-side across the cassette. Make sure that the top of the cover is dry in the vicinity of the elution ports, and apply the sealing film so that it covers all of the elution ports. Press the film against the cover around the elution ports with your fingers or a blunt smooth object (like the covered end of a Sharpie marker) to ensure a good seal. (We like Finnzymes PCR plate sealing film, but we have had equivalent success with many other tapes, including Scotch packaging tape.)



- Score the tape between each elution module with a sharp blade. This allows each elution module to be opened independently, thereby preventing sample cross contamination from the wicking of droplets between the elution ports.



5. When performing wide cuts from your samples, make sure to select cassette definitions designed for No Overflow Detection: "2% Marker B No overflow Detection" or "1.5% Marker A No Overflow" (depending on which marker/cassette you are using). These definitions are available from the 'cassette type' drop-down menu on the Protocol editor page (vs.3.71 or higher). These 2 cassette types will allow you to enter wide collection ranges in your protocol without the necessity of using a pause.
6. After the run is complete, remove the seals one-at-a-time by peeling them off along the long axis of the cassette. This method prevents inadvertent wicking of sample droplets from module to module.



7. Pipette your samples out of the elution module as usual. If the modules are properly sealed, the final elution volumes will be within 1-2 ul of the starting values.

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