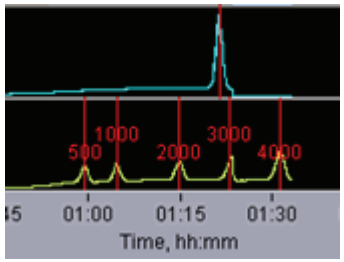
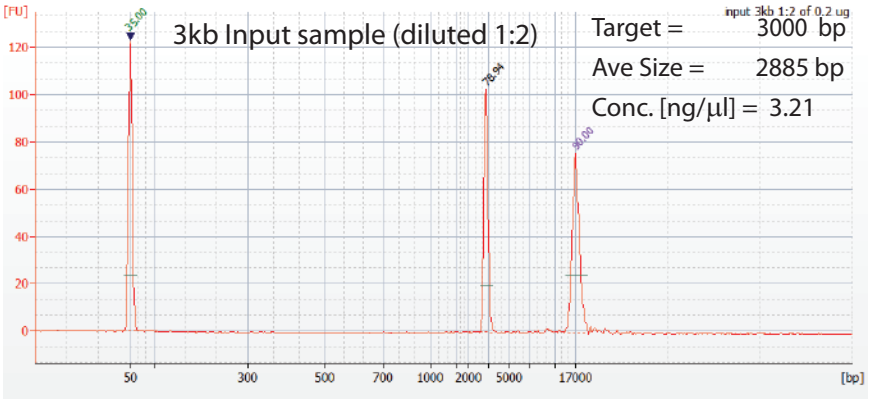
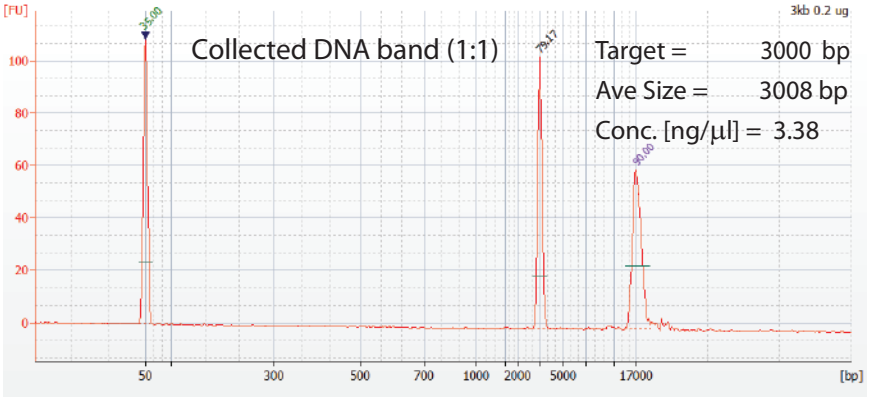
Typical Results

At the end of a run, users should observe the following optical displays in the run monitor. Marker D1 is on the bottom and input DNA is shown above. Note that the DNA band may appear "clipped" due to elution.



Input and sample collections are run an Agilent Bioanalyzer using a DNA 1000 chip. The analysis volume is 1 µl from a 40 µl elution volume (1:40 dilution). The figures below show typical results.





* These data are not intended to imply guaranteed results or performance. This product is intended to demonstrate that the Pippin product is functioning as expected, and that proper operational technique is being used. Users should refer to the Operations Manual for performance specifications.

Control DNA

For Validation of 0.75% Gel Cassettes
for Band Capture with Midori Green Dye

collects DNA bands between 2 - 5kb

Item# CBC7501

For:

BluePippin™

BLG7510 Gel Cassettes

0.75% Band Capture 2 – 5 kb Marker D1

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What is Enclosed

BluePippin band cassettes and instruments tested for DNA band capture by collecting a restriction fragment of known size and amount. This kit contains one tube with the DNA fragment type that is used for validation by Sage Science, sufficient for 4 sample loads. Users load 40 µl of control DNA into a sample lane. Control samples contain 200 ng of 3 kb DNA per 40 µl, premixed with loading solution.

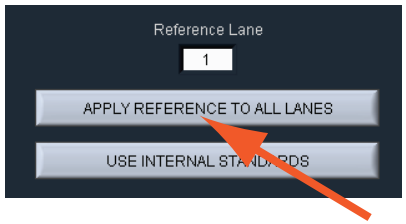
To Use

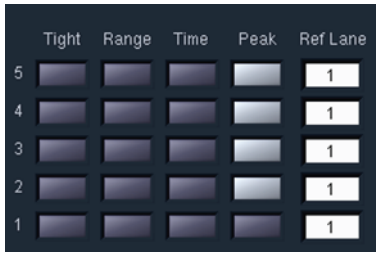
Refer to the BLuePippin Operations manual (or Cassette Quick Guide for BLG7510) for detailed procedures, and then follow these steps:

1. In the protocol tab of the BluePippin software, select "0.75% Band Capture 2-5 kb Marker D1) for the Cassette Type drop-down menu.

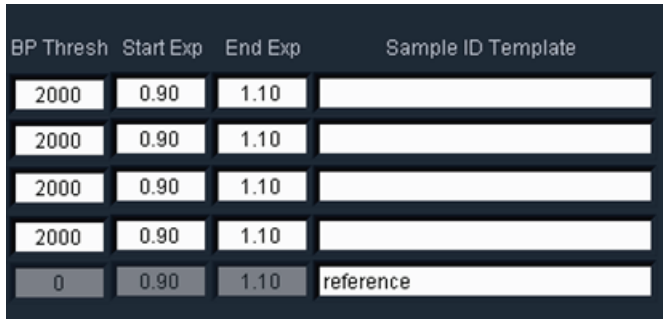
2. Program a band capture protocol using "Peak" Mode. Use the settings in the figures shown below:

External marker D1 (supplied with the BLG7510 cassettes) will added to lane 1 in this example.





Use "2000" for a base pair threshold value. For succesful band capture, the value should not exceed 90% of the target band value (2700 bp for a 3 kb band). The Start Exp and End Exp factors are software default values. Adjustments to these values should not be required for DNA band amounts below 500 ng.



3. Calibrate the BluePippin optics with the calibration fixture. Use **0.30 as the target value.**

4. Inspect and prepare a 0.75% gel cassette from the BLG7510 kit.

5. Pippette 40µl of Midori Green DNA binding dye (supplied with the BLG7510 cassettes) into the + side buffer chamber (furthest from the sample well) of the sample lane to which the control DNA will be added. Refer to the schematic below for the correct chambers to which the Midori Green dye is added.

6. Using a large Pippette tip (P1000, 750µl volume) mix the dye by slowly aspirating the chamber contents.

7. Load 40 µl of Marker D1 into the desginate reference lane (lane 1 in the example on the opposite page).

8. Load 40 µl / lane of the control DNA solution provided in this kit into a sample well(s). Load the remaining well(s) with samples or control DNA.

7. Run the instrument.