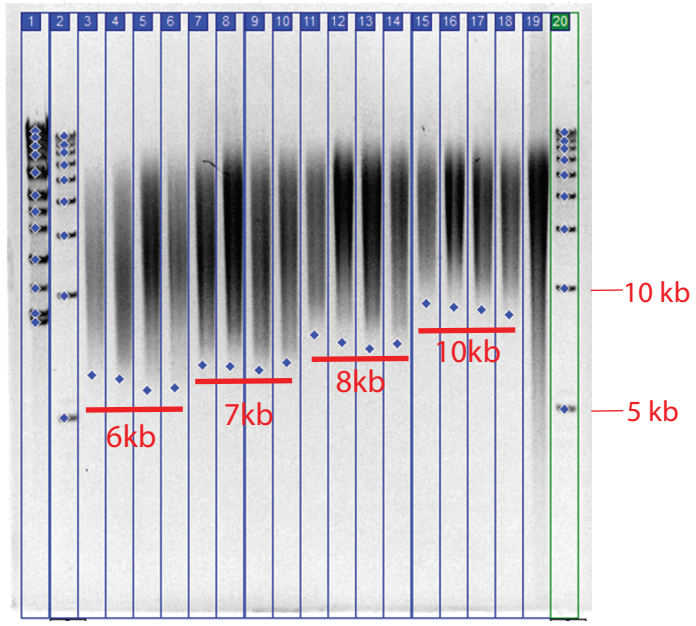
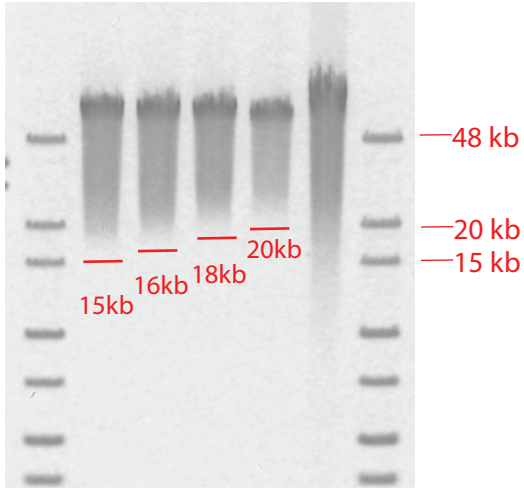
Sheared DNA Samples

The gel images below show sheared genomic DNA samples run on the BluePippin using high-pass protocols.





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

BluePippin™

Control DNA

For Testing and Validation of 0.75% Agarose Gel Cassettes

For High-Pass protocols

Part No. CHP7504

Gel Cassette Kit Numbers:

BLF7510

PAC20KB

High-Pass Protocols:

>6-10 kb vs3

>15-20 kb

sage science

What is Enclosed

Control DNA for High-Pass protocols consists of a DNA ladder with 16 size markers between 0.5 - 36 kb (16 sample loads [1.75µg/40µl] in 680 µl total volume). With High-Pass protocols, users set a threshold (between 6-10 kb or 15-20 kb) in the BluePippin software. DNA above that threshold will be collected, and lower molecular weight DNA will be filtered out from the genomic sample.

To Use

1. Use the PAC20KB (Marker S1) or BLF7510 (Marker S1) agarose gel cassette.
2. Carefully follow the cassette preparation and sample load instructions that are outlined in the BluePippin Operations manual or High Pass User Guides.
3. Load the "0.75% DF Marker S1 high-pass 6-10kb vs3" or "0.75% DF Marker S1 high-pass 15-20kb" cassette definition in the BluePippin software protocol editor and the enter the software values shown the images below. Make sure the "Range" button is selected for lanes 1-3 and 5, and deselected for lane 4.
4. Remove 40µl of buffer from each sample well
5. Pippette 40µl of Marker S1 into well 4.
6. Pippette 40µl of the Control DNA into sample wells 1-3 and 5.
5. After the run, analyze the collected fractions on pulsed-field gel (using Pippin Pulse or similar) for sizing, and/or Qubit® Fluorometer and Quant-iT™ HS dsDNA reagent for quantitation to assess yield.

Sample protocol for >6-10 kb high pass (Marker S1 in lane 4)

	Tight	Range	Time	Peak	Ref Lane	Target *	Start *	End *	Pause *
5					4	30000	10000	50000	0
4					4	0	0	0	0
3					4	29000	8000	50000	0
2					4	28500	7000	50000	0
1					4	28000	6000	50000	0

Marker S1 must be in lane 4

Sample protocol for >15-20 kb High Pass (Marker S1 in lane 4)

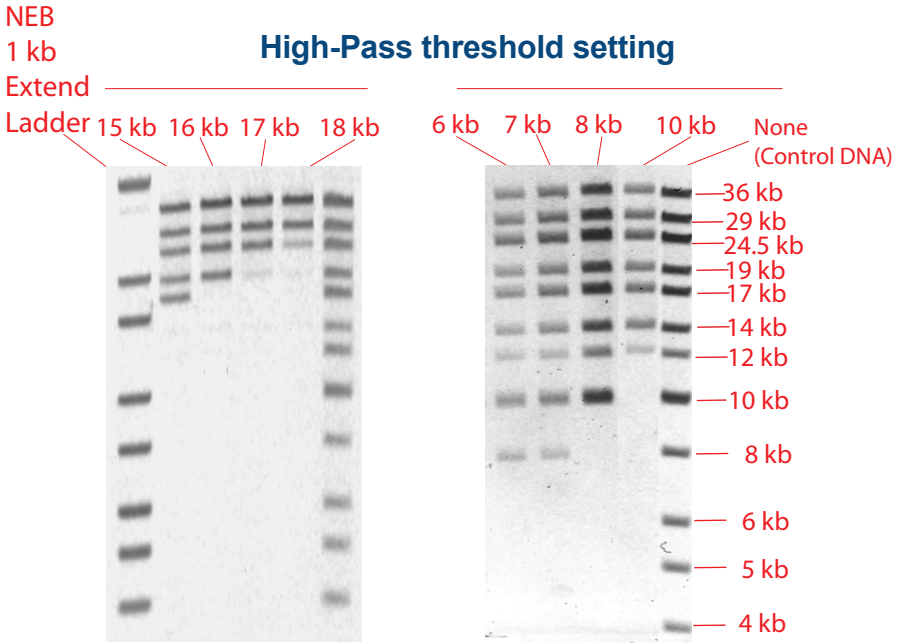
	Tight	Range	Time	Peak	Ref Lane	Target *	Start *	End *	Pause *
5					4	34000	18000	50000	0
4					4	0	0	0	0
3					4	33500	17000	50000	0
2					4	33000	16000	50000	0
1					4	32500	15000	50000	0

Marker S1 must be in lane 4

Typical Results

Marker S1

At the end of a run, marker peaks will be detected in designated marker lane in the BluePippin main screen software display.



The gel images above show expected size selections of control DNA CHP7504 using the >6-10kb and 15-20kb protocols, when compared to the non-size selected control DNA. 10µl of the total 40µl eution was loaded on the gel. The analytical gel was run with a Pippin Pulse using the 10-48kb pre-set protocol and run for 15 hours. 0.75% SeqKem Gold agarose from Lonza was used.