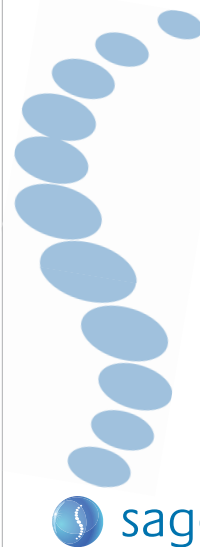# Control DNA

For Testing and Validation of 0.75% Agarose Gel Cassettes

collects targets between 18 kb - 27 kb

Item# CON7604

For:

BluePippin™

BMF7510 Gel Cassettes

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What is Enclosed

Pippin cassettes and instruments are functionally tested using restriction digests of genomic DNA from E. coli. For each cassette type, a different restriction digest is used, chosen so that size distribution of the digested DNA closely matches the useful fractionation range of the cassette, without any significant peaks or discontinuities. Following restriction digestion, the control DNA is purified by phenol:chloroform extraction, dialyzed, and diluted into BluePrep electrophoresis buffer. The DNA is premixed with Pippin loading solution and is provided ready for loading – no additional loading solution should be added. The DNA concentration is 5 micrograms per 40 microliters. 40 microliters of control DNA should be used per lane. Each tube contains sufficient volume for 16 sample loads.

Control DNA is useful to test, refine, and troubleshoot Pippin size fractionation protocols. It can also be used to check system performance.

To Use

1. Carefully follow sample load instructions outlined in the Operations Manual.

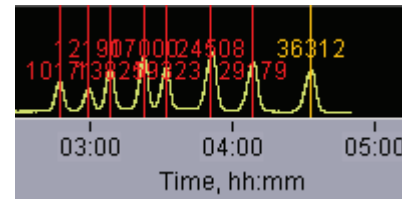2. Pippette 40 µl of Control DNA into a sample well

QC protocol for 0.75% agarose cassettes

Cassettes are tested using "Tight" mode with the following target values. Extracted samples are run an aagarose slab gel, and analyzed using TotalLab Quant™ software. The analysis volume is 20µl from a 40 µl elution volume (1:2 dilution).
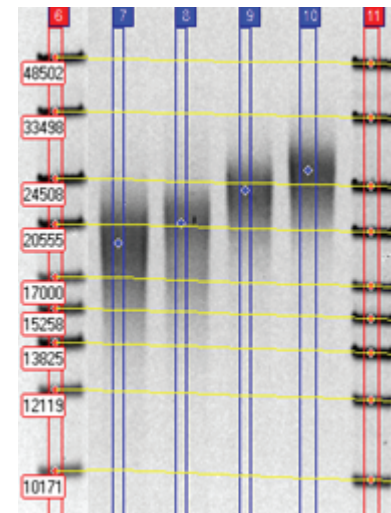
	Tight	Range	Time	Peak	Ref Lane	BP Target	BP Start	BP End	BP Pause
5					1	18000	12366	23634	0
4					1	20000	14272	25728	0
3					1	23000	16962	29038	0
2					1	26000	19297	32703	0
1					1	0	0	0	0

Typical Results

The T1 marker set will appear as follows in the graph display of the Main Tab of the BluePippin software:

The following results show typical results from QC testing*.

	Target	Actual			
Lane	BP	BP start	BP end	BP ave.	CV
7	18000	13498	25993	18577	16.8
8	20000	14168	25339	20291	13.8
9	23000	17374	29830	23685	13.1
10	26000	19093	34761	26273	14.9

* 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.