

Improved **Sequencing** performance
with **Publication-Quality** data.

Agencourt® CosMCPrep® System

High and Low Copy Plasmid Purification

The Agencourt CosMCPrep system is a versatile plasmid purification procedure. It is based on the patented Solid Phase Reversible Immobilization (SPRI®) paramagnetic bead-based technology and uses a single protocol to purify a variety of high and low copy number template types. This system is easily automated using Beckman Coulter's Biomek® Laboratory Automation Workstations and Agencourt methods and can produce high-quality templates, quickly and efficiently. With flexible sample processing, ease of automation, and high quality results, the Agencourt CosMCPrep kit is an ideal solution for all template purification needs.

Key Features:

- High quality plasmids
- Excellent savings on BigDye¹
- Superior downstream sequencing results
- Single protocol for the purification of all template types including:
 - Low copy plasmids
 - High copy plasmids
 - Fosmids
 - BACs
 - Cosmids
- Automation procedures produce minimal variability in plasmid yield and quality
- Throughput is 18 x 96 preps in 8 hours on a Biomek FX/NX

Outstanding Downstream Performance

Sequencing results obtained from samples purified using Agencourt CosMCPrep yield pass rates greater than 90% even when a 1/16th BigDye dilution is used. The Agencourt CosMCPrep system enables efficient purification of fosmids (Fig 1) and BACs (Fig 2) with a high Phred 20 read length. The superior quality of plasmids purified using Agencourt CosMCPrep produce improved sequencing performance with publication-quality data, as seen in Figure 3 and Table 1.

Genomics
Proteomics
Cell Analysis
Particle Characterization
Centrifugation
Lab Automation
Bioseparation
Lab Tools

Distribution of Phred 20 Across Drosophila Fosmids using Agencourt CosMCPrep

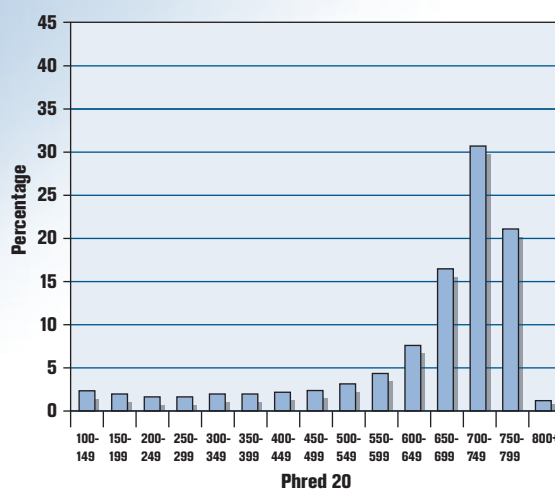


Figure 1. Agencourt CosMCPrep enables high quality purification of low copy plasmids such as fosmids and BACs. 88,800 Drosophila fosmids were prepared using Agencourt CosMCPrep and resulted in a pass rate of greater than 90% and Phred 20 read length of 637 bp.

Distribution of Phred 20 for End Sequencing of Dog BACs using Agencourt CosMCPrep

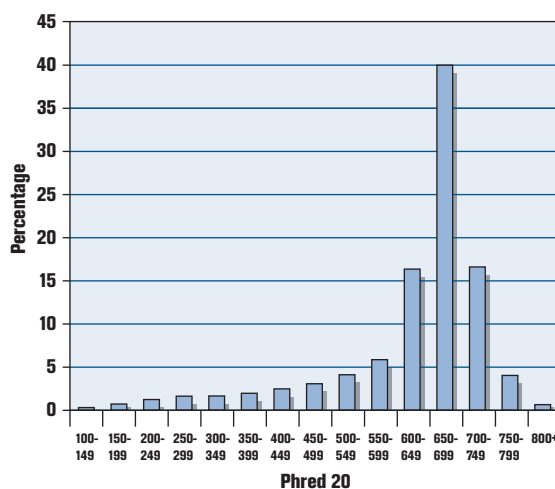


Figure 2. Agencourt CosMCPrep enables high quality purification of low copy plasmids such as fosmids and BACs. Dog sequence with an average Phred 20 read length of 634 bp.

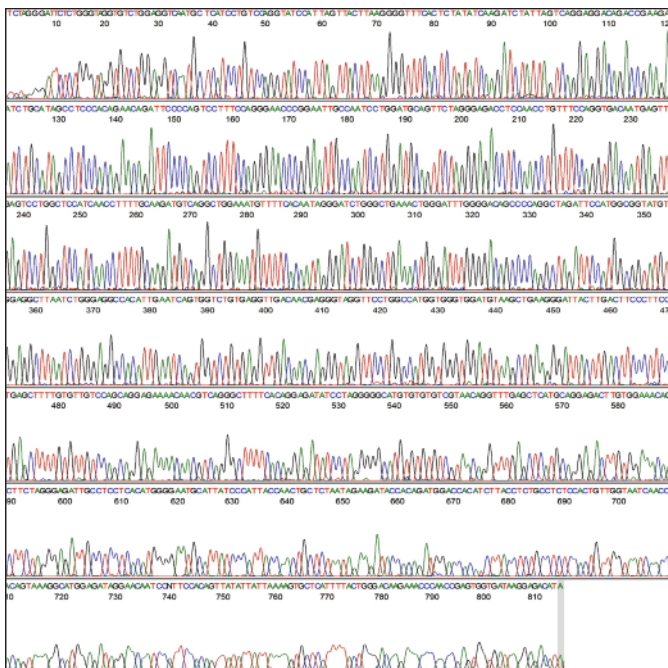


Figure 3. A Dog BAC end sequencing project consisting of 137 96-well plates where 13,152 clones generated BAC clones were prepared with Agencourt CosMCPrep and sequenced in forward and reverse directions for a total of 26,304 reads. Unincorporated Dye Terminators were removed using the Agencourt CleanSEQ process and run on an ABI 3730 using a one hour run protocol.

Table 1 - Typical Yield and Performance for Low and High Copy Plasmids

	Low Copy	High Copy
Culture Volume (2xYT)	1.7 mL	1.7 mL
Yield ²	Up to 2 µg	Up to 4 µg
Phred 20 Bases	650	650
Pass Rate ³	>90%	>95%

Table 2

Robotic Platform	Plate Throughput
Biomek NX ^P 96 Multi-channel	18 plates/7 hours
Biomek FX ^P 96 Multi-channel	24 plates/8 hours
Biomek NX ^P 96 PlateStak ¹	18 plates/7 hours
Biomek FX ^P 96 PlateStak	24 plates/8 hours

Summary

The versatility and flexibility of the Agencourt CosMCPrep process enables the purification of a variety of high and low copy template types. This system is easily automated using Beckman Coulter's Biomek Laboratory Automation Workstations and Agencourt methods and can produce high-quality templates, quickly and efficiently.

Kit Components

- L2 Buffer
- N3 Buffer
- Pur4 Buffer
- RE1 Buffer



Ordering Information

For more information, please visit our website at www.agencourt.com or contact your local sales representative.

Product	Size	Int'l Product #	U.S. Product #
Agencourt CosMCPrep 4,000 rxn Kit	4,000 preps	A29174	001046
Agencourt CosMCPrep 384 rxn Kit	384 preps	A37064	A37064
Related Products	Size	Int'l Product #	U.S. Product #
Agencourt CleanSEQ Kit (8 mL)	800/ 1,600 preps ⁴	A29151	000121
Agencourt CleanSEQ Kit (50 mL)	5,000/ 10,000 preps ⁴	A29154	000136
Agencourt SPRIPlate [®] 96R - Ring Magnet Plate		000219	000219

¹ All trademarks are property of their respective owners.

² PicoGreen[®] assay was used to quantify DNA.

³ A passing read is comprised of an average Phred value greater than 20 for bases between 100 bp and 300 bp in length.

⁴ 96 or 384 well format