

Nucleic Acid Chemistry Laboratory Automated DNA Sequencing Facility Guidelines

The DNA Sequencing Facility is open from 8:00 am to 4:00 p.m. Monday through Friday. We are closed on all Washington University Holidays as well as the entire week between Christmas and New Year's Day.

Samples may be dropped off any time between 8:00 a.m. and 4:00 p.m. Please bring your samples to Room 406 in the Biotechnology Building. A remote sample drop off site is available on the 5th floor of the McDonnell Pediatric Research Building (MPRB). ABI Prism BigDye Terminator Premix aliquots may be purchased from the PCR Freezer in Room 406 of the Biotechnology Building or from the PNAFL Freezer on the 5th floor of MPRB.

Services and prices.

ABI Prism BigDye Terminator Premix \$125.00 each

The premix aliquots contain approximately 170 μ l. This is enough to perform 20 standard cycle sequencing reactions (8 μ l premix in 20 μ l reaction). Copies of the protocol booklet are available by request.

Cycle Sequencing PCR Reactions \$6.00 each

Bring us your DNA templates and custom primers. We will set up and run the cycle sequencing PCR reactions, purify the extension products using spin columns and analyze the samples on a sequencer. This service includes standard sequencing primers at no extra charge. PCR reactions received before 10:00am will run on a sequencer that night, and be available by noon the next day.

96-Well Plate Cycle Sequencing PCR Reactions \$432 per plate

Bring us 96-well PCR plates loaded with your DNA templates and primers with a volume of 12 μ l in each well. We will add BigDye premix, run the cycle sequence reactions, purify the extension products and analyze the samples on a sequencer. Well H12 must be left blank on all plates for our positive control reaction. The minimum number of samples for this service is 80. Turnaround time for this service averages 48 hours (more than 2 plates). A template for your sample names is available when submitting plates.

Prepared Cycle Sequencing Reactions \$3.50 per lane

Bring us your purified and dried cycle sequencing extension product. We will analyze it on a sequencer and post the data. Turnaround time for this service is usually 24 hours (one working day).

96-Well Plate with Samples Ready to Load \$240 per plate

Bring us your high-throughput samples, purified and dried in a 96-well plate. We will resuspend them and analyze them on a sequencer. The turnaround time for this service averages 48 hours. A template for your sample names is available when submitting plates.

Cycle Sequence Reaction Clean-Up**\$1.00 per tube**

Bring us your cycle sequencing PCR reactions straight from your PCR machine. We will remove all of the unincorporated dye terminators and analyze them on a sequencer.

Sequence Data Printouts**\$1.00 per sequence****Sequence Data Troubleshooting and Advice****No Charge**

Bring us your sequencing problems. We can troubleshoot your sequencing data, and give you suggestions for optimizing sequencing reactions.

Samples will be run in the order they are received.

We run sequencers 5 days a week. Samples will run overnight. Data is usually ready by noon the next day. If your samples are run on Friday, data will be available by noon on Monday.

PCR reactions received before 10:00am will run on a sequencer that night, and be available by noon the next day.

Retrieving your data is easy.

Your electropherograms will be available for pick-up inside Room 406 Biotech or from the Self Service Oligo Bin on the 8th Floor of CSRB (outside of Room 8801).

Your electropherogram and text files can be downloaded via SFTP from our secure server with the USER ID and PASSWORD assigned by the DNA Sequencing Lab.

We are here to help you optimize your Automated DNA Sequencing.

If you need current protocols, if you have questions about your data or if you have problems with your sequencing that you would like to discuss, please feel free to call 362-0282 or drop by Room 406.