Materials

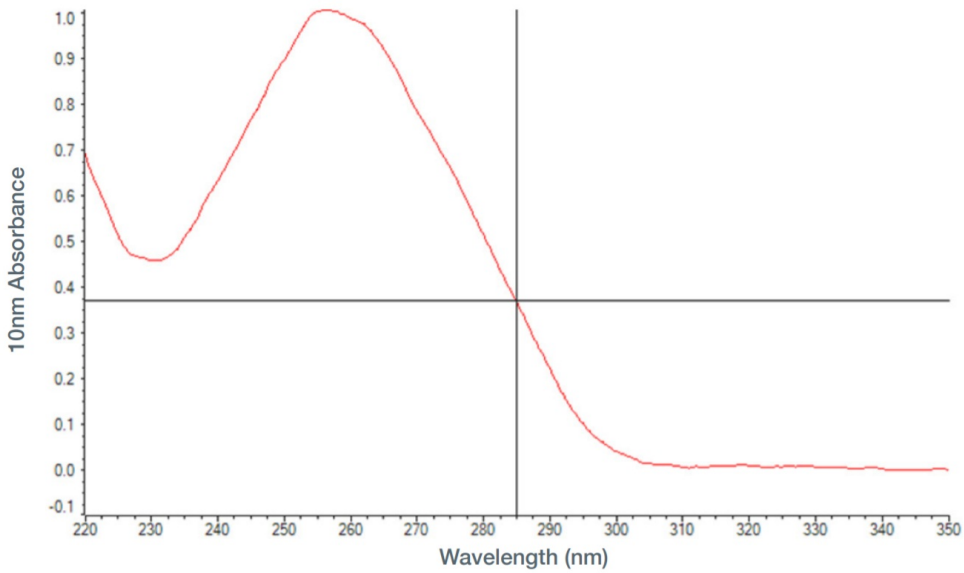
- 1 rat stool pellet
- QIAamp PowerFecal DNA Kit
- QIAGEN RNase A
- TE buffer (1 mM EDTA, pH 8.0)
- 2 ml Eppendorf tubes
- 1.5 ml Eppendorf DNA LoBind tubes
- Vortex mixer
- Incubator
- Microfuge

Method

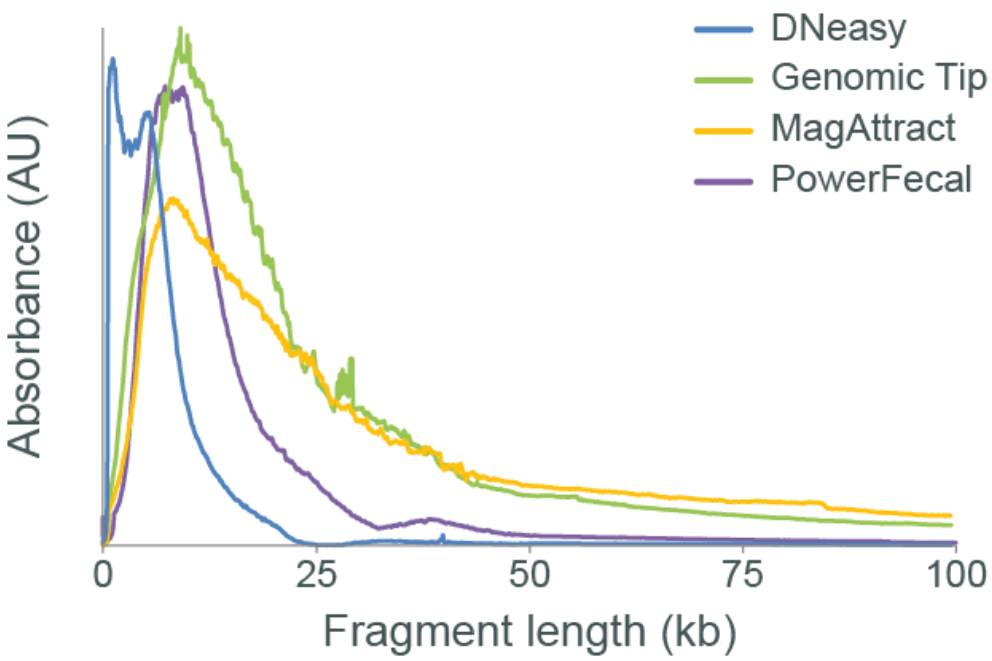
1. Transfer 1 rat stool pellet to a 2 ml Eppendorf tube, and proceed with extraction according to the QIAamp PowerFecal DNA Kit protocol (page 10, steps 2–18). If no vortex adapter is available, the tubes can be taped to the vortex mixer for the bead-beating step. If using this method, do not overcrowd the tubes, and ensure the content within each tube can be properly mixed.
2. To elute the DNA, add 100 µl of TE buffer to the centre of the white filter membrane, and incubate at room temperature for 30 minutes. Then, centrifuge at 8000 rpm for 2 minutes.
3. Take ~20 µl of eluate (corresponding to 3 µg of DNA) and perform a SPRI size selection.

Results

- **Yield:** 22–28 µg
- **OD 260/280:** 1.92 (after SPRI size selection)
- **OD 260/230:** 2.17 (after SPRI size selection)



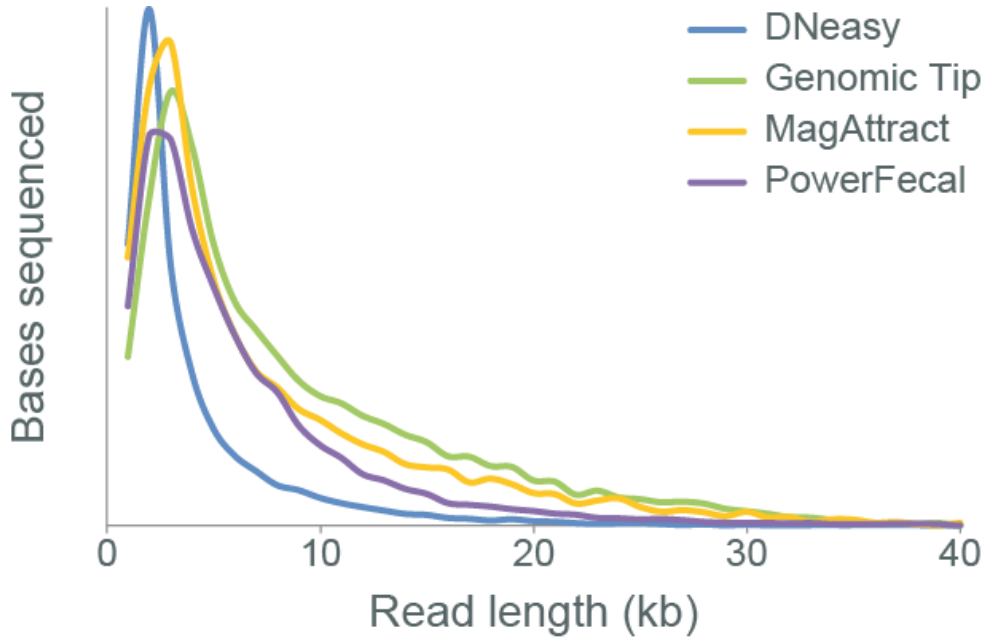
- **Fragment size (FEMTO pulse) after SPRI size selection:**



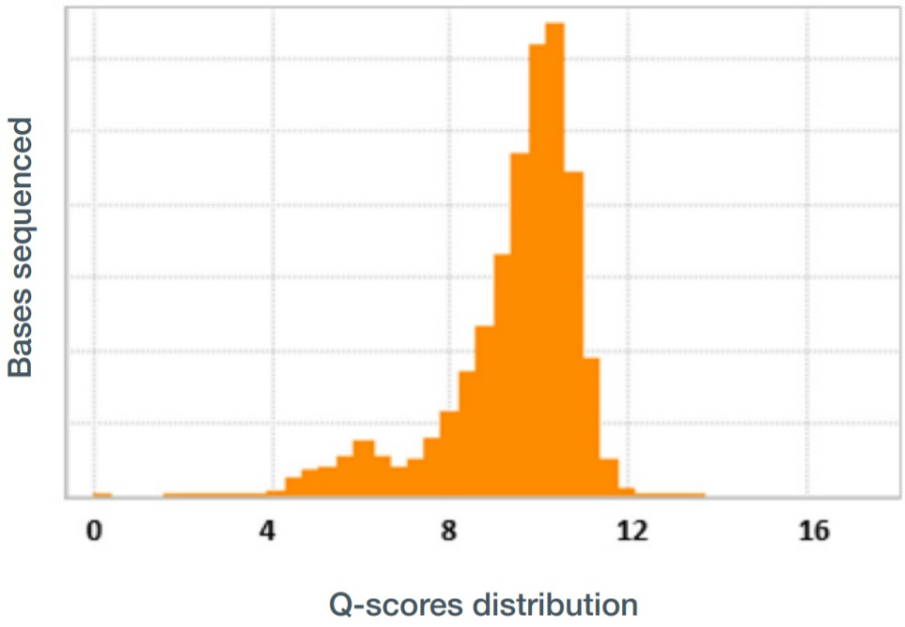
Sequencing performance

Libraries were prepared using the Ligation Sequencing Kit.

- Read length profile:



- Qscore distribution:



- Alignment results: