Supplementary Material 1. Extended Methods

rbcL amplification PCR conditions:

Reagent	**1 sample/well volume (µL)**
Phusion HF Buffer (#M0530S)	6
dNTPs (10mM)	0.9
Primers (5µM)	2.4
$MgCl_2$ (50mM #M0530S)	0.4
Phusion DNA Polymerase (#M0530S)	0.6
Molecular Biology grade water	18.7
Sample (1:10 dilution with molecular grade water)	1
Cycling conditions: 98ºC for 2 mins followed by 30 cycles of (98ºC 20 secs; 55ºC 45 secs; 72ºC 60 secs) with a final extension period of 72ºC for 5 mins	
Primers (5'-3', Illumina tags in bold) F:**TCGTCGGCAGCGTCAG**ATGTGTATAAGAGACAGATGCGTTGGAGAGARCGTTTC R:**GTCTCGTGGGCTCGGA**GATGTGTATAAGAGACAGGATCACCTTCTAATTTACCWACAACTG	

Reagent	**1 sample volume (µl)**

Phusion® HF Buffer (#M0530S)	10
dNTPs (10mM)	1.5
Nextera XT UDI Adapters (#20027213)	10
$MgCl_2$ (50mM #M0530S)	0.7
Phusion® DNA Polymerase (#M0530S)	1
Molecular Biology grade water	21.8
Cleaned PCR product	5
Cycling conditions: 95ºC for 3 mins followed by 8 cycles of (95ºC 30 secs; 55ºC 30 secs; 72ºC 30 secs) with a final extension period of 72ºC for 5 min.	

SPRI bead purification:

1. Add 0.7x of SPRI nucleic acid clean-up beads* to each PCR well and gently pipette mix.
2. Incubate at room temperature to allow DNA binding to beads.
3. Place on a magnetic stand for 5 minutes or until supernatant has cleared (whichever is longer).
4. Remove and discard the supernatant and wash with 50µL 80% ethanol.
5. Repeat wash step 4.
6. Remove the supernatant and allow to air dry.
7. Remove the PCR plate from the magnetic stand and resuspend the beads in TE buffer (25µL) and gently pipette mix.
8. Incubate the plate at room temperature for 10 minutes to allow the DNA to elute from the beads.
9. Place the PCR plate on a magnetic stand for 5 minutes or until supernatant has cleared.

*Custom SPRI nucleic acid clean-up beads were used which are tested against AMPure XP SPRI beads (#A63880).