

**Supplementary Table 4: DNA nanobarcodes**

Y-DNA building blocks	Ligation	DL-DNA based nanobarcodes
Y-core + YG-probe3 + YGG + YGR1		4G1R
YG-probe2 + YGR1		2G1R
YGR-probe1		1G1R
YR-probe5 + YGR1		1G2R
Y-core + YR-probe4 + YRR + YGR2		1G4R