Genomic DNA (R9 Version)

DNA repair

To repair nicks in the DNA to maximise read lengths

~30 minutes

Materials	• ~1.5 µg fragmented DNA in 45 µl
Consumables	• NEBNext FFPE Repair Mix (M6630) • Agencourt AMPure XP beads • 1.5 ml Eppendorf DNA LoBind tubes • Freshly prepared 70% ethanol in nuclease-free water • Nuclease-free water
Equipment	• Thermal cycler at 20 °C • Ice bucket with ice • Magnetic rack • Hula mixer (gentle rotator mixer) • Vortex mixer
Optional Equipment	• QuBit fluorimeter (or equivalent for QC check)

IMPORTANT

Use of magnetic beads

After washing the beads with the DNA bound it is important that they are allowed to dry to ensure that all the ethanol has been removed. However, over drying will result in some of the DNA not eluting efficiently leading to reduced recovery.

DNA repair

The FFPE DNA repair step is recommended when there is a chance that the genomic DNA contains nicks or other damage which may compromise the success of the end-prep step. FFPE DNA repair mix has been shown to improve read lengths