

## Test Report

### on long-term stability of MagPure Particle G

1. Select different batches of MagPure Particle G (including 2017, 2018, and 2019) for 10 $\mu$ l 50bp marker recovering.

2. Take 10 2ml centrifuge tubes, 5 different batches of magnetic beads, and repeat two tubes for each magnetic bead.

3. Add 300 $\mu$ l sterilized water to a 2ml centrifuge tube, add 20 $\mu$ l Proteinase K and 10 $\mu$ l 50bp marker, shake and mix well for 5 seconds. Add 450 $\mu$ l Buffer BST1 and 20 $\mu$ l different batches of MagPure Particle G to the sample, mix by shaking at room temperature for 7 minutes, during which turning up and down for several times. Transfer to the magnetic rack, adsorb the magnetic beads for 3 minutes. Discard all solutions. Add 500 $\mu$ l Buffer MKW1, mix by vortex for 15 seconds, wash once. Add 500 $\mu$ l Buffer MW2, vortex for 15 seconds, wash twice. Short centrifugation to collect droplets on the tube wall. Transfer to the magnetic rack and carefully absorb and discard all solutions. Dry in air for 10 minutes. Add 20 $\mu$ l Buffer AE and vortex to disperse the magnetic beads. Place for 3-5 minutes, during which gentle oscillations 1-2 times to accelerate DNA dissolution.

4. Take 10 $\mu$ l elution buffer for electrophoresis, and use 3 $\mu$ l (60%) and 4 $\mu$ l (80%) 50bp markers as controls. The results were as follows:

- In the figure below, GH150200 and GH1502003 refer to the 2018 batch of magnetic beads, FF140200 and FL260200 refer to the 2017 batch of magnetic beads, HA120200 refer to the 2019 year batch of magnetic beads.
- From the figure, it can be seen that there is no significant difference in the recovery of fragments of 100bp and above.

**The magnetic beads can be stored at room temperature for more than 2 years, ensuring no problems within 2 years.**

