Quick-DNA/RNA™ Pathogen MagBead (Cat. Nos. R2145, R2146)

MagMAX Express 24 - AM1836 protocol

All reagents and steps should be performed at room temperature, unless specified otherwise.

Buffer Preparation

- Add 500 µl or 1 ml beta-mercaptoethanol (user supplied) per 100 ml or 200 ml **Pathogen DNA/RNA Buffer**, respectively (final concentration 0.5% (v/v)).
- Add 20 mL (R2145) or 80 ml (R2146) of isopropanol to the **MagBead DNA/RNA Wash 1** concentrate.
- Add 30 mL (R2145) or 120 ml (R2146) of isopropanol to the **MagBead DNA/RNA Wash 2** concentrate.
- Add 1,040 µl **Proteinase K Storage Buffer** per vial to reconstitute the lyophilized **Proteinase K,** 20 mg. Vortex to dissolve and store frozen aliquots.

Protocol

1. To Row A, add 1 µl **Proteinase K** to each 50 µl cleared **DNA/RNA Shield™** sample and mix well.
2. Add 100 µl **Pathogen DNA/RNA Buffer** and mix well[1].
3. Add 10 µl **MagBinding Beads** and mix well[1] for ≥5 minutes. Important: MagBinding Beads settle quickly, ensure that beads are kept in suspension while dispensing.
4. To Row B, add 150 µl **MagBead DNA/RNA Wash 1** and mix well[1] for 1 minute.
5. To Row C, add 150 µl **MagBead DNA/RNA Wash 2** and mix well[1] for 1 minute.
6. To Row D and E, add 150 µl ethanol (95-100%) and mix well[1] for 1 minute.
7. Repeat Step 6.
8. Dry the beads at room temperature for 2 minutes or until fully dry[2].
9. To Row F, add 40 µl **DNase/RNase-Free Water** and mix well[1] for 1 minute to elute DNA/RNA from the beads.

   Alternatively, for highly concentrated DNA/RNA, use ≥20 µl volume.

   The eluted DNA/RNA[3] can be used immediately or stored frozen.

Notes:

[1] For all buffer additions and to ensure beads are properly in suspension, **mix well** by pipetting up and down several times and/or by shaking (vortexing) at ~1,300 rpm.

[2] Beads will change in appearance from glossy black when still wet to a dull brown when fully dry. Alternatively, a heat block can be used (25-55°C).

[3] It is recommended to titrate the DNA/RNA eluate for downstream applications (i.e., RT/PCR, etc.).