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Purification of Plasmid DNA by Miniprep

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Protocol status: Working

We use this protocol and it's working



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Abstract

Extraction of Plasmid DNA by Miniprep PureLink T M Quick Plasmid Miniprepa Kits

Materials

- PureLink T M Quick Plasmid Miniprep Kits
- Resuspension Buffer (R3)
- RNasa
- Lysis Buffer (L7)
- Precipitation Buffer (N4)
- Wash Buffer (W9)
- Wash Buffer (W10)
- Buffer TE
- Centrifugation columns in recollection tubes
- Overnight LB-culture
- Eppendorf Tubes of 1.6 mL
- Etanol 96-100%



- 1 Centrifuge  1-5 mL of the overnight LB-culture. Remove all medium.
- 2 Add  250 μL Resuspension Buffer (R3) with RNase A to the cell pellet and resuspend the pellet until it is homogeneous
- 3 Add  250 μL Lysis Buffer (L7). Mix gently by inverting the capped tube until the mixture is homogeneous. Do not vortex. Incubate the tube at room temperature for  00:05:00 . 5m
- 4 Add  350 μL Precipitation Buffer (N4). Mix immediately by inverting the tube, or for large pellets, vigorously shaking the tube, until the mixture is homogeneous. Do not vortex. Centrifuge the lysate at $>12,000 \times g$ for  00:10:00 10m
- 5 Load the supernatant from step 4 onto a spin column in a 2-mL wash tube. Centrifuge the column at $12,000 \times g$ for  00:01:00 . Discard the flowthrough and place the column back into the wash tube. 1m
- 6 Add  500 μL Wash Buffer (W10) with ethanol to the column. Incubate the column for  00:01:00 at room temperature. Centrifuge the column at $12,000 \times g$ for  00:01:00 . Discard the flowthrough and place column back into the wash tube 2m
- 7 Add  700 μL Wash Buffer (W9) with ethanol to the column. Centrifuge the column at $12,000 \times g$ for  00:01:00 . Discard the flowthrough and place the column into the wash tube. Centrifuge the column at $12,000 \times g$ for  00:01:00 . Discard the wash tube with the flowthrough 2m
- 8 Place the Spin Column in a clean 1.5-mL elution tube. Add  75 μL of preheated TE Buffer (TE) to the center of the column. Incubate the column for  00:01:00 at room temperature. 1m
- 9 Centrifuge the column at $12,000 \times g$ for 2 minutes. The elution tube contains the purified plasmid DNA. Discard the column. Store plasmid DNA at 4°C (short term) or store the

DNA in aliquots at -20°C (long term).