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Application Note

Dual DNA/RNA Extraction From a Single FFPE Sample

This protocol modification allows the extraction of both DNA and RNA from the same FFPE input tissue sample.

Materials required:

- 1 RNAstorm[™] kit (CD201 or CD501)
- 1 DNAstorm™ kit (CD202 or CD502)

Method:

Begin by extracting the sample according to the RNAstorm[™] kit protocol with the following modifications:

- a. Perform step 3 (normally a 2 hour incubation) for only 30 minutes at 72°C. See note below regarding possible optimization of this step.
- b. Perform steps 4 and 5 of the RNAstorm[™] protocol as directed, but do not discard the pellet in step 5.
- c. Transfer the supernatant to a new tube as instructed in step 6.
- d. Continue to incubate the supernatant for another 1.5 hours at 72°C (2 hours total including the initial 30 minutes), then proceed with step 7 of the RNAstorm[™] protocol (add Binding Buffer) and all remaining steps as instructed.
- e. Use the pellet from step b), which contains DNA, as input for step A5 (or B8, depending on deparaffinization choice) of the DNAstorm[™] kit manual.
- f. Continue with step A5 (or B8) of the DNAstorm protocol by adding 200 µL of CAT5[™] Buffer to the pellet, then continue as instructed by the DNAstorm[™] protocol.

Note: the initial incubation period can be adjusted depending on relative DNA and RNA yields. If the RNA yield is high but the DNA yield is low, reduce the incubation time in step 3 (no less than 15 mins). If the DNA yield is good but the RNA yield is low, increase the incubation time in step 3 (no more than 2 hours).

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