

Product Information

MICROWAVE TISSUE FIXATION PROTOCOL

H2100 MICROWAVE PROCESSOR

10% Neutral Buffered Formalin Procedure

REAGENTS & CONSUMABLES REQUIRED

10% Neutral Buffered Formalin (10% NBF)

Catalog No.	Quantity
HT50-1-1	48x15 mL (case)
HT50-1-2	24x60 mL (case)
HT50-1-4	24x120 mL (case)
HT50-1-128	4 L
HT50-1-320	9.5 L
HT50-1-640	19 L

500 mL Polypropylene Jar

Catalog No.	Quantity
Z38,025-3	6 pack

Microwave Cassette Holder

Catalog No.	Quantity
Catalog No. Z71,104-7	1 ea

SPECIMEN PREPARATION

Trim specimen to 1-3 mm thickness and place in standard **plastic** histological cassette. Tissue borders should not exceed the dimensions of the cassette.

PROCEDURAL NOTES

- Before beginning the tissue fixation procedure, warm up the magnetron by placing approximately 500 mL of tap water in a microwave safe container and irradiating at full power for 1 minute.
- Read and understand the Material Safety Data Sheet flammability and health hazards for 10% NBF.
- This protocol was designed for the H2100 Microwave for use with the specified jar and cassette holder. **Use of other equipment may alter results and damage tissue.**
- Up to 6 cassettes can be placed on the bottom level of the microwave cassette holder.
- Between each irradiation step gently agitate the solution by raising and lowering the cassette holder 5-10 times.
- Caution! Fixation solutions are hot. Use thermal mitts or glove liners when handling fixation jar.
- Loosely place lid on top of microwave cassette holder and jar when irradiating. Leave lid ajar when measuring temperature to avoid excessive heat loss.
- Use the provided quality control chart for recording temperature measurements.
- Adjust the microwave time as necessary to be within the 10% NBF preheat temperature range of 40-50 °C.
- Desired temperature range for the 10% NBF steps 4-15 is 40-60 °C. Care should be taken to try to keep the temperature at the optimal target temperature of 50 °C. Adjust microwave power settings as needed. Avoid repeated irradiations above the target temperature.

PROCEDURE

- Place tissue cassette(s) in 10% NBF for 1 hour at room temperature.
- Preheat 400 mL of fresh 10% NBF for 1 minute at 800 watts. **Measure temperature.**
- Using the Microwave Cassette Holder, place cassette(s) in preheated 10% NBF. Agitate solution.
- Microwave for 15 minutes at 100 watts.
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- Agitate solution. **Measure temperature.**
- Microwave for 15 minutes at 100 watts.
- Agitate solution. **Measure temperature.**
- Rinse cassette(s) in lukewarm water for 5 minutes.
- Move forward to tissue processing procedure.