

## Michel Transport Medium & Michel Wash Solution - Technical Memo

### SOLUTIONS:

Michel Transport Medium  
Michel Wash Solution

**500 ml**  
Part 1242A  
Part 1243A

**1 Liter**  
Part 1242B  
Part 1243B

**1 Gallon**  
Part 1242C  
Part 1243C

Michel Transport Medium Vial

**30 ml vial, 15 ml fill (50/cs)**  
Part 12423C

**20 ml vial, 10 ml fill (100/cs)**  
Part 12423D

**For storage requirements and expiration date refer to individual bottle labels.**

### APPLICATION:

Newcomer Supply Michel Transport Medium or pre-filled Michel Transport Medium Vials, provide a stable medium for transport of fresh unfixed tissues, such as renal, rectal, lymph node, skin and oral mucosa biopsies, which will undergo subsequent frozen sectioning and immunofluorescence studies.

Michel Transport Medium is not a fixative and does not have any fixative properties. It is not suitable for transporting cells for flow cytometry or tissues used for fluorescent in-situ hybridization (FISH) studies.

Newcomer Supply Michel Wash Solution is used to rinse Michel Transport Medium from tissue after transport and prior to freezing.

### METHOD:

**Fixation:** Fresh unfixed tissue

**Solutions:** All solutions are manufactured by Newcomer Supply, Inc.

### PROCEDURE:

1. Bring aliquot of Michel Transport Medium or pre-filled Michel Transport Medium Vial to room temperature prior to use.
  - a. See Procedure Note #1.
2. Place fresh tissue in an adequate amount of Michel Transport Medium as soon as possible after excision, ensuring that the specimen will be totally submerged in fluid during transport.
  - a. See Procedure Note #2.
3. Store and/or transport tissue in Michel Transport Medium up to a maximum of five days. Care should be taken to maintain cool to ambient temperatures of 4°C to 22°C during transport.
4. Upon receipt, wash tissue held in Michel Transport Medium with Michel Wash Solution; three changes, 10 minutes each.
5. Freeze tissue sample(s) per laboratory protocol.
6. Tissue placed in Michel Transport Medium may also be processed for light or electron microscopy review. Wash tissue 2-3 minutes in tap water and place in appropriate fixative prior to processing.
  - a. See Procedure Note #3.

### PROCEDURE NOTES:

1. Michel Transport Medium is routinely stored at 2-8°C. During refrigerated storage some precipitation may develop which should re-dissolve by allowing solution to reach room temperature prior to use.
2. Previously frozen tissue will not provide optimal testing results and should not be used with Michel Transport Medium.
3. Tissues held/transported in Michel Transport Medium, prior to fixation and routine processing, may provide satisfactory histological results if conditions as outlined in Procedure Step #3 are maintained. Morphology detail will not be equal to that of expediently fixed and processed tissue.

### REFERENCES:

1. Beutner, Ernst H., Tadeusz Chorzelski and Samuel Bean. *Immunopathology of the Skin*. 2nd ed. New York: Wiley, 1979. 65.
2. Carson, Freida L., and Christa Hladik Cappellano. *Histotechnology: A Self-instructional Text*. 4th ed. Chicago: ASCP Press, 2015. 24-25.
3. Chua, Allison, Gina Chua and David Kelly. "Preservation of Acetylcholinesterase Enzyme Activity in Non-Frozen Rectal Biopsy Specimens for Hirschsprung Disease". *The Journal of Histotechnology* 35.2 (2012): 80-88.
4. Michel, Beno, Yoram Milner and Kathy David. "Preservation of Tissue-Fixed Immunoglobulins in Skin Biopsies of Patients with Lupus Erythematosus and Bullous Disease". *The Journal of Investigative Dermatology* 59.6 (1973). 449-452.
5. Modifications developed by Newcomer Supply Laboratory.