

## Lymph Node Grossing Aid – Technical Memo

(Formaldehyde in Ethanol, Acetic Acid)

**SOLUTION:**

Lymph Node Grossing Aid

**4 X 1 Gallon**

Part 1093A

**20 Liter Cube**

Part 1093B

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

**APPLICATION:**

Newcomer Supply Lymph Node Grossing Aid is a ready-to-use fixative solution that can serve as either a primary or secondary fixative to enhance the visibility and yield of lymph nodes in any specimen in which lymph node examination is critical, such as; breast, colon, lung, radical neck dissection, small intestine and omentum.

The combination of formaldehyde, ethanol and acetic acid in the Lymph Node Grossing Aid solution allows for rapid tissue penetration and following sufficient fixation/immersion lymph nodes will be visibly grayish in color, noticeably standing out from surrounding tissues and more readily identifiable.

**METHOD:****Fixation:**

Larger Biopsies: A minimum of 10-12 hours is recommended

Small Biopsies: A minimum of 4 to 6 hours is recommended.

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

**FIXATION PROCEDURE:**

- Place fresh tissue specimen in an adequate amount of Lymph Node Grossing Aid solution as soon as possible after surgical excision.
  - See Procedure Note #1.
- Gross tissue specimen in a manner to allow Lymph Node Grossing Aid to adequately penetrate.
  - Breast tissue: work with the entire specimen or remove a smaller area with suspected lymph nodes. Bread loaf tissue to increase surface area and promote faster fixative penetration.*
  - Colon tissue: cut open, rinse and pin-out, work with either a segment(s) of colon or entire specimen.*
  - Other specimens: gross to increase tissue surface area and promote faster fixative penetration.*
- Return specimens to Lymph Node Grossing Aid solution and allow to fix for a sufficient amount of time, depending upon size and type of tissue.
- After adequate immersion in Lymph Node Grossing Aid, remove specimen and re-gross. Remove adipose and palpate for lymph nodes and/or identify nodes by their visibly grayish color.
- Hold tissue specimens in either Lymph Node Grossing Aid solution or Formalin 10%, Phosphate Buffered (Part 1090) until ready to process.
  - See Procedure Note #2.

**PROCEDURE NOTES:**

- A specimen initially received in Formalin 10%, Phosphate Buffered can remain in fixative until initial grossing occurs, then transferred to Lymph Node Grossing Aid solution as a secondary fixative.
- Extended storage of tissue in Lymph Node Grossing Aid is not recommended. When appropriate fixation is achieved transfer Lymph Node Grossing Aid fixed wet tissue to Formalin 10%, Phosphate Buffered for long-term storage purposes.

**REFERENCES:**

- Koren, Rumelia, Shlomo Kyzer, Adrian Paz, Vladimir Veltman, Baruch Klein, and Rivka Gal. "Lymph Node Revealing Solution: A New Method for Detection of Minute Axillary Lymph Nodes in Breast Cancer Specimens." *The American Journal of Surgical Pathology* 21.11 (1997): 1387-1390.
- Luna, Lee G. *Manual of Histologic Staining Methods of the Armed Forces Institute of Pathology*. 3rd ed. New York: Blakiston Division, McGraw-Hill, 1968. 4.
- Newell, Ken, Barry Sawka, and Brian Rudrick. "An Inexpensive, Simple and Effective Aid for the Retrieval of Lymph Nodes From Colorectal Cancer Resections." *Archives of Pathology Laboratory Medicine* 125 (2001): 642-45.
- Modifications developed by Newcomer Supply Laboratory.