Tips / FAQ's

While every procedure in this manual must be treated individually, there are common points which apply to all .The following items are answers to some commonly asked questions. Of course, if you have any other questions please feel free to take advantage of Poly Scientific's technical assistance department.

- In general, an 8oz. kit will stain 100 slides and a 16oz. kit will stain 200.
- All timings given are representative and should be adapted to your particular laboratory conditions.
- All silver stains should be performed in acid cleaned glassware for best results.
- Use only deionized or distilled water, unless otherwise directed.
- Most working solutions, once made, should be used immediately.
- All solutions are individually labeled with expiration dates and storage conditions.
- All procedures are written for manual use but all can and have been adapted for any automated stainer.

FIXATION TIPS

- Tissue should be fixed immediately after removal from the body.
- Tissue should be cut to less than 5 mm in thickness for best results.
- The volume of fixative should be 10-20 times the tissues.
- Formalin penetrates most tissue at a rate of 0.5mm per hour.
- Heat, agitation and vacuum will all speed up the rate of penetration of formalin.
- Always use high quality reagents to maximize performance.
- 10% Buffered Formalin should be used for long term tissue storage.

PROCESSING TIPS

- Tissue should be no larger than 5mm in thickness.
- Always take into account the thickness of your tissue when determining station times.
- Avoid heat during dehydrating and clearing to reduce the possibility of overprocessing.
- The use of vacuum is always encouraged during processing.
- Establish a reagent rotation schedule suited to your lab.
- Always use high quality reagents to maximize performance.
- A hydrometer is a practical, easy way to determine when to rotate or replace alcohols.
- Use Xylene, not a substitue, in the cleaning cycle.

TROUBLESHOOTING

Problem	Cause	Solution
Dull Uneven Hematoxylin Staining	Improper Fixation	- Increase time in fixation and maintain an appropriate schedule
	Overdifferentation	- reduced the time in differentation to minimum neccessary
	Depleated Hematoxylin	-determine and maintain a proper rotation schedule
	Incomplete Deparaffinization	- use three stations of xylene and maintain a rotation schedule
Dull Uneven Eosin Y Staining	Improper Fixation	- increase time in fixative and maintain an appropriate schedule
	Depleated Eosin Y	- determine and maintain a proper rotation schedule
	Solution Carryover	- drain slides thoroughly inbetween stations to prevent carryover
	Bleeding	- rotate final xylenes to prevent carryover of alcohol into coverslips
Cloudy Murky slides	Incomplete clearing	- determine and maintain a proper rotation schedule and use three stations of xylene