

Gomori's Aldehyde Fuchsin

Aldehyde Fuchsin Solution

Add 2 gm of Pararosanilin to 400 ml of 60% ETOH and mix well.

Then add 4 ml of Paraldehyde (Hamm Cabinet) and 6 ml of Hydrochloric Acid in this order.

Mix and set aside (Do not move!)

Let ripen for 3 days, then filter.

Note: If the solution does not have a metallic sheen on top, it probably isn't any good. Solution is stable for approximately 10 days.

Mayer's Hematoxylin: Rowley Biochemical Institute (cat# SO-369)

Eosin Stock:

Eosin Y	20 g
Distilled water	400 ml
ETOH, 95%	bring up to 2000 ml

Eosin Working:

Eosin stock	150 ml
ETOH, 80%	450 ml
Glacial Acetic Acid	3 ml

Procedure:

1. Deparaffinize and hydrate to water.
2. Place slides in 70% ETOH for 1 min.
3. Aldehyde Fuchsin Solution for 15 minutes.
4. 3 changes of 95% ETOH- 3 min., 2 min., 1 min. respectively.
5. Dip slides in 70% ETOH, then wash in tap water for approximately 15 minutes (check slides microscopically for staining of the islet cells and elastic fibers).
6. Stain in Mayer's Hematoxylin for 10 seconds.
7. Wash in running tap water for at least 10 minutes to blue.
8. Rinse in distilled water.
9. 2-3 dips in 50% ETOH.
10. 3 dips in Eosin.
11. Quickly dehydrate slides in 2 changes of 95% and Absolute ETOH.
12. Clear in several changes of Xylene, then mount slides with a synthetic resin.

Results:

Beta cells in the islets and elastic fibers- Deep purple

Nuclei- blue

Cytoplasm- pink

Reference: The Jackson Laboratory Histology Lab

H&E Set-up for the Leica Autostainer (Program 1)

<u>Station</u>	<u>Reagent</u>	<u>Time</u>	<u>Exact or Not Exact</u> (Yes/NO)
1	Xylene	7 min.	No
2	Xylene	7 min.	No
3	Xylene	5 min.	No
4	Abs Etoh	2 min.	No
5	Abs Etoh	2 min.	No
6	95% Etoh	2 min.	No
7	70% Etoh	1 min.	No
Wash 5	Tap Water	1 min.	No
8	D H2O	20 sec.	No
9	Hematoxylin	4 min.	Yes
Wash 4	Tap Water	5 min.	No
	Ammonia H2O	1 min.	No
Wash 2	Tap Water	5 min.	No
10	70% Etoh	30 sec.	No
11	Eosin	2 min.	Yes
12	95% Etoh	30 sec.	Yes
13	95% Etoh	30 sec.	Yes
14	Abs Etoh	45 sec.	No
15	Abs Etoh	2 min.	No
16	Abs Etoh	1 min.	No
17	Xylene	2 min.	No
18	Xylene	2 min.	No
Exit	Xylene		