ScyTek LABORATORIES INC.

Instructions For Use

AAS-IFU

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Alpha Amylase Solution (1%)

Description and Principle
This α-Amylase reagent acts on glycogen to break it into smaller sugars that are then washed off the tissue section allowing visual comparison of digested and undigested slides. This reagent is usually used within a PAS staining procedure.

Expected Results

PAS Positive Material:	Magenta
Nuclei:	Blue
Glycogen:	Removed

Kit Contents (Cat# PAD-1)	**Storage**
Additional Kit Reagents Sold Separately	
1. Alpha-Amylase Solution (1%)	2-8°C
2. Periodic Acid Solution	2-8°C
3. Schiff's Solution	2-8°C
4. Hematoxylin, Mayer's	18-25°C
5. Bluing Reagent	18-25°C

Suggested Controls *(not provided)*
Liver.

Uses/Limitations
For In-Vitro Diagnostic use only.
Do not use if reagents become cloudy or precipitate
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile
Intended for FFPE sections cut at 5-10µm.
This procedure has not been optimized for frozen sections.
Frozen sections may require protocol modification.

Storage
Store at 2-8°C.

Safety and Precautions
Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

Procedure
1. Deparaffinize two identical sections if necessary and hydrate to distilled water.

2. If sections are Zenker-fixed, remove mercuric chloride crystals using iodine and clear with sodium thiosulfate. Rinse in running tap water.

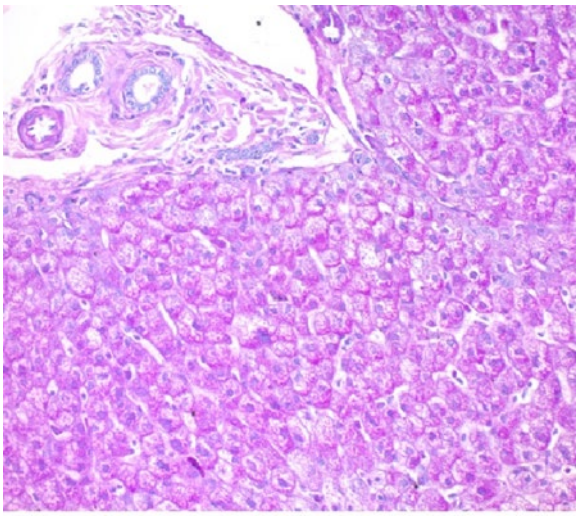
3. Apply Alpha-Amylase Solution (1%) to one slide and incubate for 10-30 minutes at room temperature.

4. Rinse in 2 changes of distilled water.

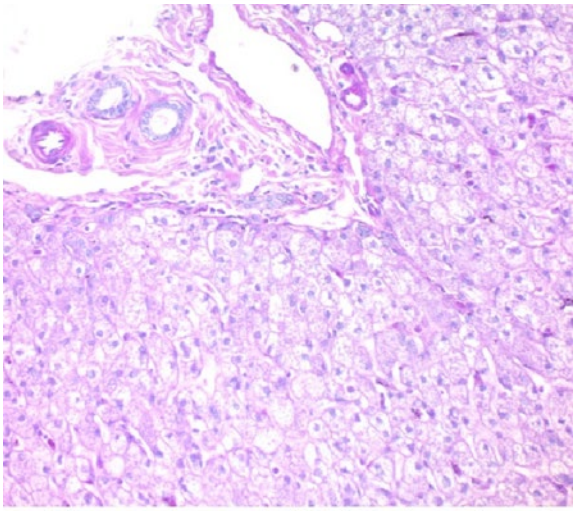
Note: The remainder of this procedure is performed on both the "digested" and "undigested" slides.

5. Apply Periodic Acid Solution (1%) to tissue section and incubate for 5 minutes.

6. Rinse slide in 4 changes of distilled water.



Glycogen demonstrated on healthy Human Liver with Periodic Acid Schiff (PAS) without digestion by alpha amylase



Healthy Human Liver treated with alpha-amylase and stained with Periodic Acid Schiff (PAS)

7. Apply Schiff's Solution to tissue section and incubate for 10-20 minutes.

8. Rinse slide in warm running tap water for 2 minutes.

9. Rinse slide in distilled water.

10. Apply Hematoxylin, Mayer's (Lillie's Modification) to tissue section and incubate for 1 minute.

11. Rinse in running tap water for 1 minute followed by 2 changes of distilled water.

12. Apply Bluing Reagent for 5 seconds and rinse in distilled water

13. Dehydrate through graded alcohols.

14. Clear, and mount in synthetic resin.

Note: A crystal precipitate may be seen when staining with small volumes of Schiff's solution on horizontal slides. This precipitate can be removed by rinsing vigorously in warm tap water for 5 minutes or by reapplying Periodic Acid Solution to the tissue and agitating the slide for 30-60 seconds. These modifications should be performed before counterstaining.

References

1. Culling CFA, Allison RT, Barr WT.: Cellular Pathology Technique, 4th Edition. Butterworths, Pages 216-220, 1985.
2. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. CV Mosby, Columbus, OH. Pages 164-167, 1980.

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