GILL 2X & 3X HEMATOXYLIN

DESCRIPTION

Gill hematoxylin is a general purpose progressive type nuclear stain and available in 3 strengths, Gill 1X, 2X, and 3X. Cell blocks are usually stained using Gill 1X Hematoxylin accompanied with Eosin to demonstrate the cellular detail for cytology analysis. Gill 2X and Gill 3X are routinely used for histological specimen. The Gill 2X can be used when a darker nuclear stain is desired and Gill 3X when an even richer or more intense nuclear stain is required. This hematoxylin gives clear and sharp nuclear staining with little to no background. Gill's Hematoxylin permits longer shelf life with greater control of staining performance and reproducibility. It stains chromatin at a controlled rate and within a narrow range of optical densities.[1,2]

PROCEDURE

1. **Paraffin slides:** Deparaffinize in xylene, then rehydrate through graded alcohols to water.
   Frozen slides: Fix in Ethanol 95% (or other fixative according to lab preference) and rinse in water.
2. Stain in Hematoxylin solution, Gill 2X or Gill 3X: 1 to 4 minutes
3. Rinse in two changes of DI water: 1 minute each
   Note: this could also be done using running tap water, but we recommend DI water to avoid the varying pH tap water can have
4. Bluing Reagent (until tissue turns blue): 15 to 60 seconds
5. Rinse in two changes of DI water: 30-60 seconds
   Note: this could also be done using running tap water.
6. Ethanol 95%: 30 to 60 seconds
7. Eosin Y 1% Alcoholic, Eosin Y Intensified, or Eosin-Phloxine: 30 to 60 seconds
   Note: for an increased definition of cytoplasmic components over Eosin Y 1%, select Eosin Y Intensified or Eosin-Phloxine as an alternative.
8. Dehydrate in Ethanol 95%, two changes: 10 dips each
9. Dehydrate in Ethanol 100%, two changes: 1 minute each
10. Clear in Xylene or Xylene Substitute, two changes: 1 minute each
11. Coverslip using Acrylic Mounting Medium and examine under microscope.

RESULTS

Nuclei, nuclear components – blue to dark purple
Cytoplasm, red blood cells, collagen, elastic fiber, muscle – shades of pink

REFERENCES

1. Baker, J.R.: Quart, J.Micr. Sci. 103:493-517, 1962
2. Baker, J.R. and Jordan, B.M.: Quart, J Micr Sci. 94:237-242, 1953

PRODUCT INFORMATION

Cat. #	Description
3315	Deionized Water
7013	Hematoxylin, Gill 2X
7014	Hematoxylin, Gill 3X
3356	Bluing Reagent
7006	Eosin Y, 1% Alchoholic
7007	Eosin Y, Intensified
7009	Eosin - Phloxine
3340	Ethanol Solution, 95%
3341	Ethanol Solution, 100%
3346	Xylene
3349	Acrylic Mounting Medium

Order today at **EthosBiosciences.com**

