

C-201 CANALICULI AND LACUNAE STAIN FOR HARD TISSUES

Fixation: Modified Bouin's Solution (F-41)

Decalcification: Trichloroacetic Acid – Alcohol (F-98)

Embedded in: Paraffin, ester wax, celloidin or gelatin.

PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Mordant in Cupric Nitrate, 1% (C-201-1) overnight.
3. In a coplin jar, add 4-6 gm Copper Shot (C-201-3) per 100 ml of Protargol Solution (C-201-2) and place slides in the solution. Place in a 60°C oven. Staining is complete when the sections have a golden brown color (4-16 hours). Wash very briefly in distilled water (1 dip).
4. Reduce in Hydroquinone Solution (C-201-4) for 3-10 minutes. Wash thoroughly in running water to remove all of the reducing solution.
5. Tone 5-10 minutes in Gold Chloride, 1% (C-201-6) to which 3 drops of Glacial Acetic Acid per 100 ml have been added. Rinse in water.
6. Develop in Oxalic Acid, 2% (C-201-7) until sections have a faint purple or blue color. Rinse in water.
7. Place in Sodium Thiosulfate, 5% (C-201-8) for 5-10 minutes. Wash thoroughly in water.
8. Dehydrate, clear and cover.

Stain Results:

Canaliculated, lacunae, odontoblasts and dentinal tubules	Bluish to purplish black
---	--------------------------

References:

- Powers, M.M., Rasmussen, G.L., and Clark, G., Anat.Rec., 111:171-6, 1951
Clark, G. (ed), Staining Procedures, 3rd edition, Williams & Wilkins, Baltimore, c 1973, p 136
Bodian, D., Anat Rec., 65:89-97, 1936
Bodian, D., Anat. Rec., 69:153-62, 1937