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Liver Cancer Laboratory

## Oil red O staining

Edited by Lucy 05/23/12

### Materials

1. Propylene glycol (kit included)
  2. Oil red o stain (kit included)
  3. Modified Mayer's Hematoxylin (kit included)
  4. 10% Formalin
  5. 85% Propylene glycol
- OIL RED O STAIN KIT : American MasterTech  
item#KTORO

### Procedure

1. Place frozen sections at RT 30min.
2. Preheat Oil Red O Stain to 60°C.
3. Place frozen sections in 10% Formalin for 2-5 minutes  
then rinse slide in tap water.(fixed slide may skip this

step)

4. Circle the tissue by Dako Pen.
5. Place slide in **Propylene glycol** for 2 minutes.
6. Place slide in **Oil Red O Stain** heated to 60°C for 6 minutes.
7. Differentiate tissue in **85% propylene glycol** solution for 1 minute.
8. Rinse slide through 2 changes of distilled water
9. Place slide in **Modified Mayer's Hematoxylin** for 1 minute
10. Rinse slide through 2 changes of tap water
11. Rinse slide through 2 changes of distilled water
12. Coverslip using an aqueous mounting medium

### Results

- Fat cells and neutral fat: RED
- Nuclei: BLUE

## Links

1. <https://www.ucsf.edu/>
2. <https://pharmacy.ucsf.edu>
3. <https://medschool.ucsf.edu>
4. <https://www.ucsfhealth.org/>
5. <https://pharm.ucsf.edu/xinchen>