

Slide Scanning 玻片掃描

1. Purpose

- 1.1 An automatic digitalization of histological sections will be provided. Sections obtained from biological specimens and samples of human or animal bodies on standardized slides can be shown by either transmitted light mode or reflected light fluorescence mode.

2. Safety Requirements

- 2.1 General laboratory procedures should be followed.

3. Associated Documents

- 3.1 Appendix: Aperio AT2 Operating Manual
- 3.0 Aperio ImageScope Software Version 12.3.2.8013: After download Aperio ImageScope Software software, run Aperio ImageScope Software.

4. Notes

- 4.1 The standardized slide should be 73.6 to 76.6 mm in length, 24.6 to 26.5 mm in width and 0.95 to 1.05 mm in thickness. Maximum thickness including coverslip should be 1.48mm.
- 4.2 Scanning region is 24 mm (top to bottom edges) X 57.6mm (measured from the right edge of the slide).
- 4.3 If the specimen needs to be scanned, some precautions should be noticed:
 - i) The anti-fading reagent should be added to mounting reagent.
 - ii) Do not use neither nail polish to seal the slide corner nor contain glycerol only mounting reagent.
 - iii) Please use the mounting reagents that harden as they dry.

5. Equipment

- 5.1 Aperio AT2, LEICA

6. Supplies

- 6.1 Histological sections
- 6.2 Wiper
- 6.3 70% alcohol

7. Procedures

The Aperio AT2 Scan is able to work in automatic and manual modes for both brightfield and fluorescence application. Choose the scanning mode needed and follow the appropriate procedures.

- 7.1 Turn on the power of Aperio AT2, PC and monitor.
- 7.2 Double click the Aperio AT2 software icon on the desktop.
- 7.3 Choose the scan applications on the selection window.
 - 7.3.1 Select either Automatic and Manual options.
 - 7.3.2 Automatic mode should be used when section slides are large in number.
 - 7.3.3 (i) Manual mode is used only when individual slide need to be digitized.
 - (ii) Special stain or parameter need to be determined.
- 7.4 Insert the slides into the magazine and fill some empty slides on the other side of the magazine. This is to prevent the magazine from topple over.
 - 7.4.1 Transport the filled magazine without its cover on it into Mirax Scan.

- 7.5 Insert magazine and select Routine work
 - 7.5.1 Select the slide position to digitize the slides.
 - 7.5.2 Preview the slides.
 - 7.5.3 Adjust the thresholding and other settings if necessary.
 - 7.5.4 Save scan profile.
 - 7.5.5 Select Start scan.
 - 7.5.6 Select output slides and remove magazine.
- 7.6 Select output slides and remove magazine.
- 7.7 Terminate all the program.
- 7.8 Close Aperio AT2 software.
- 7.9 Turn off the power of Aperio AT2, PC, monitor.

