Blood film / cytology staining

In order to be examined microscopically all smears need to be stained. The same stain can be used in your clinic for manually staining blood films and cytology smears. For manual staining it is recommended that slides be immersed in stain-filled jars rather than covering slides with staining solution because formation of precipitate by evaporation can occur.

Materials required:

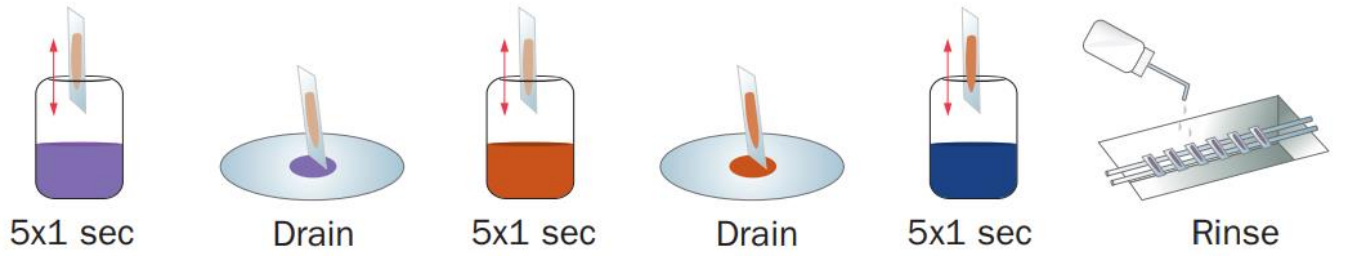
Microscope slides / RAL Diff-Quik (Fixative solution / Solution I (Eosin Y) / Solution II (Methylene blue)) / stain jars or containers.

Note: All above materials can be ordered from Awanui Veterinary via online ordering.

How to:

1. Prepare a blood film or cytology smear and air dry before staining
2. Dip the slide in Fixative solution - 5 x one-second dips - and drain excess on filter paper.
3. Dip the slide in the Solution I (Eosin Y) - 5 x one-second dips - and drain excess on filter paper.
4. Dip the slide in the Solution II (Methylene blue) - 5 x one-second dips - and rinse with water.
5. Air dry slide or use hair dryer on low setting.

Image from RAL Diagnostics brochure.



Expected colour results:

Nuclei/chromatin -purple, erythrocytes - light red, cytoplasm - clear to pale to dark blue.

Lab tips:

- It is essential to remove excess stain (Solution I) to minimise stain oxidation, before dipping in Solution II.
- Stain will remain stable for several days while in use, and should then be refreshed (old stain may have increased stain precipitate and take longer to achieve the correct stain level).
- Staining time will depend on stain age and sample type. For example, thicker cytology smears (such as lymph node aspirates or bone marrow) may need longer staining times. Start with the recommended times then check the smear under the microscope on low power so assess if additional staining is required.
- Close the stain containers when not in use to prevent evaporation.

Please refer to our current price book for sample types, test turn-around times and pricing. If you have any questions or would like any further information, please contact your local Awanui Veterinary laboratory or Territory Manager.