Complete Blood Count 全血球計數

1. Purpose

1.1 The purpose of complete blood count which known as CBC is used to evaluate the compositions and concentration of blood. Complete blood count provides 24 measurements related to blood cells, including all information related to white blood cell count, neutrophils, lymphocytes, monocytes, eosinophils, basophils, red blood cell count, hemoglobin concentration, hematocrit, mean corpuscular volume, mean corpuscular hemoglobin and concentration, red cell distribution width, platelet count, mean platelet volume, platelet distribution width, and plateletcrit.

2. Safety Requirements

2.1 General laboratory procedures should be followed.

3. Associated Documents

3.1 Mini Centrifuge
3.2 Vortex Mixer

4. Notes

4.1 Wear protective gloves while collecting blood sample to avoid contacting with pathological microbes.
4.2 Sufficient amount of blood is required (100µL) to analyze up to 24 parameters.
4.3 Deliver the blood sample within 4 hours after collection if possible and seal the sample at low temperature (4℃) and deliver to TMC as soon as possible.
4.4 Do not centrifuge the blood sample.
4.5 Do not adulterate the blood sample.
4.6 Do not expose the blood sample to sunlight directly.
4.7 Do not provide blood sample with clots.
4.8 Blood sample is not allowed to use heparin as anticoagulant.

5. Quality Control

5.1 IDEXX ProCyte Dx* Hematology Analyzer e-CHECK* (XS) which are Low and High respectively are used to ensure the accuracy and precision of IDEXX ProCyte Dx.

6. Equipment

6.1 IDEXX ProCyte Dx
6.2 IDEXX ProCyte Dx* Hematology Analyzer e-CHECK* (XS)

7. Supplies

7.1 Whole blood (100µL)
7.2 Glove
7.3 Paper towel
7.4 Wiper
7.5 Microtainer with K2E (tube with K2EDTA)
7.6 70% alcohol

8. Procedures

8.1 Collect about 100µL of whole blood.

8.2 Transfer whole blood to 500µl K2E coated microtainer with extreme care.
8.3 Shake whole blood sample softly and make sure the blood cells are well suspended to avoid blood clotting
8.4 Allow the IDEXX ProCyte Dx* Hematology Analyzer e-CHECK* (XS) come to room temperature
8.5 Turn on IDEXX ProCyte Dx
8.6 Shake the three controls softly and make sure the blood cells are well suspended
8.7 Run the three controls
8.8 Check the setting
8.9 Set the ID number
8.10 Prepare test sample to come to room temperature
8.11 Shake test sample softly and allow the blood cells are well suspended
8.12 Aspire the blood sample
8.13 Result obtained
8.14 Wash IDEXX ProCyte Dx using Cleaner Concentrate.
8.15 Turn off IDEXX ProCyte Dx