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INSTRUMENT STANDARD OPERATING PROCEDURE MANUAL

College of Medicine

SAFETY AND LABORATORY COOMMITTEE, C.O.M, K.F.U.

Prepared by

Document Number	Name	Signature	Date
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Document History

Document Section	Details of Amendments	Date	Modified by (Initials)
SOP	First Draft on SOP for the operation of **VITEK 2 Compact**	1-12-2020	
	This instrument to be operated by trained personal only		

1. OBJECTIVE

- ☐ The document describes the operation of **VITEK 2 Compact**

2. SCOPE

- ☐ VITEK 2 Compact is a fully automated system, which guarantees excellence in **routine microbial identification.**
  VITEK 2 Compact includes an extended identification database, which enables you to detect a larger range of microorganisms. All identification stages from reading to the recording of results are automated, optimizing workflow. As the system operates with bar-coded cards, full traceability is ensured and the risk of transcription errors is minimized.

The compact solution for fast, accurate ID/AST testing with expert confidence .

3. RESPONSIBILITIES

- ☐ It is the responsibility of designated personnel in the lab to train staff and students on this procedure and to ensure adherence to this procedure under supervision.
- ☐ It is the responsibility of designated personnel (staff or Student) to follow the instructions of this procedure under supervision.

4. REFERENCES

- ☐ https://www.biomerieux-usa.com/sites/subsidiary_us/files/18-vitek2-systembrochure_v2.pdf

5. DEFINITIONS

- ☒ **1-HP Computer, Keyboard and mouse**.
  2- LCD Monitor.
  3-Laser Printer.
  4-Barcode Scanner.
  5-Power Conditioner UPS.

- ☒ **1-User interface screen and keypad**

  2-Fill door with indicator

3-Load door with indicator
4-Waste collection door.
5-User access door.
6-Densi chek plus.

☒ 1-Cards.
2-Saline.
3-Tubes.
4-Pipettes.
5- Tips
6-Densi Chek Plus standards.
7- Loop.

6. SAFETY PRECAUTIONS

☒ This instrument is suitable for research use only. Only specialized personnel that know the health risks associated with Bacteria, use protective eyeglasses or mask and gloves.

7. PROCEDURE FOR OPERATING of VITEK 2 Compact

7.1.

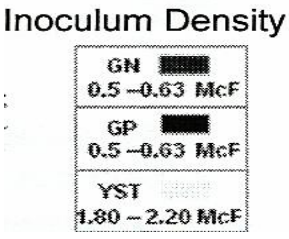
☒ **First, prepare the sample**

1- Put 3ml of saline in to tub.

2-Pick up a colony and Dissolve it.

3-mix by loop or vortex.

4-Check the optical density with DensiCHek.



5- Take one ID card and set in the cassette

- **AST Cards**: **put 3ml of saline in to tub**.
- Take from the ID tub if GN 145 µ - GP 280 µ.
- **Toke one AST card and set in the same ID cassette.**

☒ **Loading sample** 1- open system by username and password then
2- Open the icon for entering samples, choose a new cassette, put the cassette number, then scan barcode cards for the samples, then write the name of the sample, then save.
3- Load cards on instrument for fully automated processing
4- Cards inoculated inside instrument and manually transferred from filling door to loading door for processing.
5- Results in as little as 5 to 8 hours.
Results are concurrently printed and the data sent to the Results View folder on the left side of the screen called the Navigation Tree where the information is archived.
6 - Data is automatically recorded and generated by the computer in the form of a printout. The printout for QC organisms will be filed in the VITEK-2 Streamlined Quality Control Tracking Log along with other information on Quality Control. The printouts for any other test organism will be filed with the corresponding test sheets.

- **Notes**: Use McFarland standards Kit to check the Instrument monthly**.**

7.2. Software Operation

1-Turn on the system.

2- Turn of the computer

3- Wait for 10 minutes to warm up

4- Select the **software** for VITEC 2

5- Enter user and password

7- Press VITEC 2 button.

. Open the system in computer and Double click on Vitek 2 software icon on the desktop.

From "File Menu" select new sample and select a new caste.

7.3. Turning off the Instrument

Shut down the Instrument after making sure that there are no samples inside the Instrument.

7.4. Warning

1- DON'T disconnect electricity while the device is working.

2- Biohazardous spills can occur inside the V2C instrument. All organism Suspensions, cards, cassettes, test tubes, sample transfer tubes, waste bin And the user interface panel should be considered as potentially infectious.