



INSTRUMENT STANDARD OPERATING PROCEDURE MANUAL

College of Medicine



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Document Section	Details of Amendments	Date	Modified by (Initials)
SOP	First Draft on SOP for the operation of Centrifuge for eppendorf ultra speed	2-12- 2020	Lolwa Al helal Nourah
×	with cold unit		Alshebli

1. OBJECTIVE

The document describes the operation of Centrifuge for eppendorf ultra speed \Box with cold unit

2. SCOPE

A centrifuge is a device in which centrifugal forces are generated by rotation, as the more heavy particles are directed outwards away from the axis of rotation, and the less heavy particles remain in a central place

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.hettichlab.com/downloadcenter/Products/Manuals/MIKRO_220/AB2200DEENFRI T.pdf

5. **DEFINITIONS**

Primary device

MIKRO 200 PACKAGE 1:

1x MIKRO 200 Centrifuge

1x Angle rotor, 24-place

In addition to the package listed above, the Hettich MIKRO 200 supports 6

Lid with screw top and hole in turning handle

6. SAFETY PRECAUTIONS

Cautions Unbalanced centrifuges may move slowly across the surface they are on.. Immediately turn off unbalanced centrifuges to prevent damage to the machine

7. PROCEDURE FOR OPERATING Centrifuge for eppendorf ultra speed

with cold unit

Turning on the instrument: place the centrifuge on a stable surface.

Since the machine is equipped with an automatic balancing system, . The amount of solution in each tube is approximated by visualization, and then symmetrically placed in the central spacer.

Place the lid centred on the rotor.

Insert the supplied key into the hole in the handle and close the lid firmly by turning the key in a clockwise direction.

Control knob

Set the device by specifying the number of turns and the number of minutes

The centrifugation run is effected as long as the button is held down. The LED in the button lights up during the centrifugation run as long as the rotor is turning.

Store inputs and changes.

End centrifugation run.

The rotor runs down with a pre-selected brake step. The right-hand LED in the button lights up until the rotor is stationary. Once the rotor is stationary the left-hand LED flashes in the button. Pressing the button twice triggers the EMERGENCY STOP.

Unlock the lid.

The left-hand LED in the button goes out.

Leave the parameter input.

Switch between RPM and RCF display. RCF values are displayed

7.1. Software Operation.

- 7.2. Steps of the Procedure
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7.3. Turning off the Instrument

We press the shutdown button

- committee, committee 7.4. Warning