



COOLING CENTRIFUGE

- Cooling from -20°C to +20°C Centrifugation speed up to 30,000rpm in 2ml centrifuge tubes Automatic error detection and rotor change with time, speed and on or off machine status.
- **Usages**
 - For RNA, DNA and protein isolation. Preparation of 1% chicken RBC. Preparation of Nano particle solutions. Separation of serum and plasma from whole blood and seminal plasma from semen.
- **Working Principles**
 - Centrifugation is the process of separating two or more liquids in a mixture by rotation in a container so that the lighter density liquid rises to the top. It is occasionally necessary to centrifuge samples in refrigerated conditions to ensure sample integrity. **Application**
 - Centrifugation of various biological samples.
- **User instructions (including sampling instructions)**
 - It is important that all staff working in the Research Facility use the same procedure when operating the centrifuge as specified in the trial protocol, to ensure consistency and continuity in the sample processing.
 - Identify the speed and duration at which you wish to centrifuge samples PRIOR to using this instrument.
 - Check the rotor you intend to use and be certain that the rotor is rated for the speed at which you would like to use it.

- If the rotor is not capable of being operated at the target speed, you will need to identify the rotor that is capable of being used at the desired speed, and then transfer your samples to a centrifuge tube that will fit and rebalance the samples, remembering to include the lids when balancing.
- Place the rotor in the centrifuge with the 2 pins on the underside of the rotor forming a cross with the 2 pins found on the spindle of the centrifuge. Check the name of the rotor and confirm the target speed. Locate the correct lid for the selected rotor and place it beside the centrifuge.
- Balance the opposing holders by weighing them with their tubes on an open two-pan balance. Add water to an empty tube placed in the buckets to achieve final balance. Never fill centrifuge tubes to more than three-quarters capacity.
- Symmetrically distribute balanced tubes in opposing buckets. Always operate the centrifuge with all buckets in place, even if two opposing buckets are empty.
- While the centrifuge is reaching full speed, stand with your hand on the unit to detect excessive vibration (usually due to improper balance). If excessive vibration occurs, or if a crack is heard or tube breakage is suspected, switch off the unit.