

**Incubating Light Duty Orbital Shaker**

Samples are grown under optimized cell culture conditions by precisely controlling temperature and cell aeration agitation parameters.

**Explorer® Analytical**

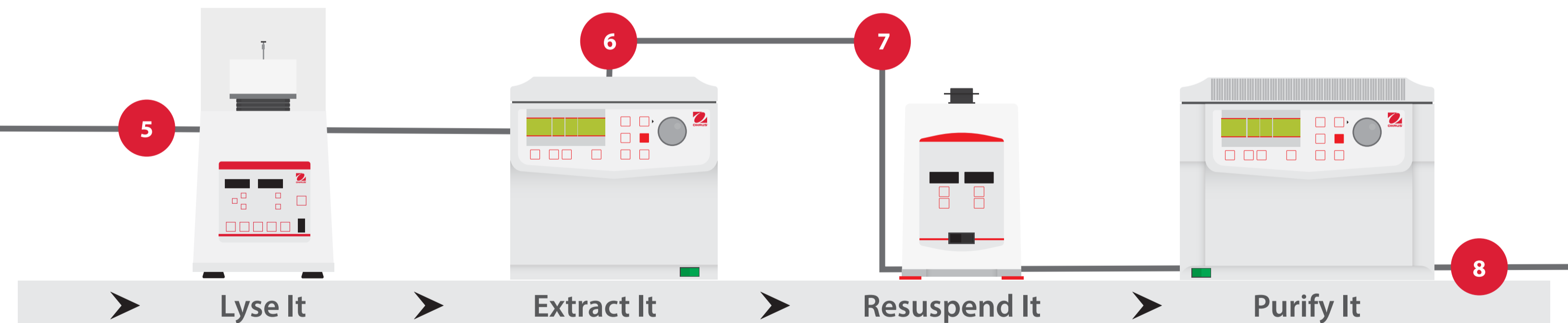
After samples are harvested and lyophilized the resulting powder is accurately weighed before suspending in an extraction buffer.

**Mini Hot Plate Stirrer**

The mixture is then stirred in a glass vessel under proper temperature conditions by using a magnetic stirrer.

**Starter 5000 pH Meter & MB120**

pH and moisture levels of the sample are measured to test the chemical and physical properties.



**HT Lysing Bead Mill Homogenizer**

Cells are then lysed in a bead mill homogenizer. By selecting the proper program and bead kit, samples can be processed quickly with the high speed linear motion.

**Frontier 5000 Series Micro (FC5515R)**

The homogenate is centrifuged at 12,000 x g in a refrigerated centrifuge to remove cellular debris while leaving behind the protein.

**Digital Vortex Mixer**

Resuspension by vortexing may be required during the protein precipitation step.

**Frontier 5000 Series Multi Pro (FC5718R)**

To isolate the protein, samples are centrifuged at 4°C in a high-speed centrifuge at 21,000 x g.