

## - معمل زراعة الخلايا والخلايا الجذعية:



### Stem cells team :-

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➤ **Name:** Water Jacketed Co2 Incubator

➤ **Uses & Mechanism of action:**

Used in incubation of cultured cells.

The Autoflow 4750 water jacketed CO2 incubator virtually runs itself; dependably controlling the temperature and CO2 level. A 32-bit digitally accurate solid-state single gas analyzer utilizes a filter correlation technique for non-dispersive infrared analysis of CO2. The measurement of CO2 is independent of humidity and temperature variations within the chamber.

➤ **Company:** NUAIRE(Dia Soft)



➤ **Name:** Cooling Centrifuge (3 Rotors)

➤ **Uses & Mechanism of action:**

A device in which solid or liquid particles of different densities are separated by rotating them in a tube in a horizontal circle. The denser particles tend to move along the length of the tube to a greater radius of rotation, displacing the lighter particles to the other end, with cooling & 3 different size of Rotor.

**Company:** Centurion scientific (Delta)



- **Name:** Digital Balance (4 digite)
- **Uses & Mechanism of action:**  
balance which shows the weight of a substance digitally and is used to weigh chemicals in labs weigh a substance to the level of almost 0.0001 gm accuracy.

**Company:** ADAM ( )



- **Name:** Electrical pipette pump
- **Uses & Mechanism of action:**  
Pull and push fluids

➤ **Company:** BOECO Germany



- **Name:** Filtration System with pump
- **Uses & Mechanism of action:**  
It is designed for water filtration, microbiology sample preparation, organic and corrosive liquids, buffers, solutions, etc. It has an outspread application on particles or solid in suspension quantification, and in solvents filtration for HPLC. MANIFOLD Q414-3 is composed by a strong support base in stainless steel with side handles, for three simultaneous filtrations or in separated controlled by round valves and adapter for vacuum application:

➤ **Company:** DIN Germany



➤ **Name:** Hot plate magnetic stirrer

➤ **Uses & Mechanism of action:**

A magnetic stirrer or magnetic mixer is a laboratory device that employs a rotating magnetic field to cause a stir bar immersed in a liquid to spin very quickly, thus stirring it and you can control on speed. Also Magnetic stirrers include a hot plate

Rpm: max 1500

Temp: max 380 c0.

➤ **Company:** M-top



➤ **Name:** Inverted microscope –connected with two camera & laptop

➤ **Uses & Mechanism of action:**

A microscope with the light source and condenser on the top above the stage and pointing down . It is useful for observing living cells or organisms at the bottom of large containers ( Culture flask ,.. )

➤ **Company:** Olympus optical CO.LTD



➤ **Name:** Laminar Airflow (class II)

➤ **Uses & Mechanism of action:**

A system of circulating filtered air in parallel-flowing planes. It reduces the risk of airborne contamination and exposure to chemical pollutants.

➤ **Company:** NUAIRE(Dia Soft)



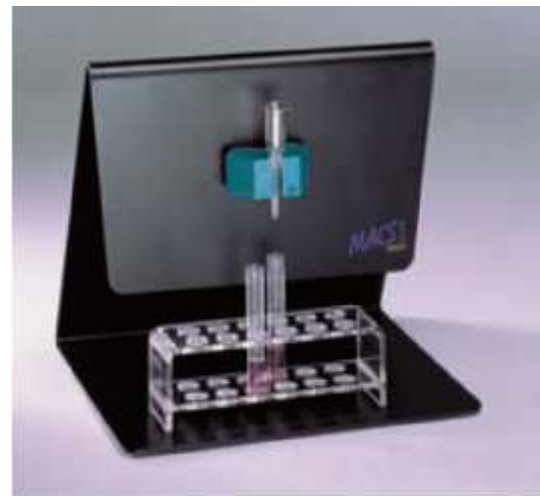
- **Name:** Light microscope
- **Uses & Mechanism of action:** used to see objects that are too small for the naked eye.

**Company:** Olympus optical CO.LTD (eptosient)



- **Name:** Filtration System
- **Uses & Mechanism of action:** Used in cells purification by labeling cells with magnetic beads. cells can be purified in up to 30 minutes for positive selection or depletion due to short incubation time and efficient MACS® Column Technology; no time-consuming bead detachment necessary.

➤ **Company:** MACS



- **Name:** PH Meter
- **Uses & Mechanism of action:** A pH meter is an electronic instrument used for measuring the pH (acidity or alkalinity) of a liquid (though special probes are sometimes used to measure the pH of semi-solid substances).

➤ **Company:** HANNA (لاب سيرف)



- **Name:** Shaking water bath
- **Uses & Mechanism of action:**  
Used to maintain a very stable temperature with shaking
- **Company:** Jeloteck



- **Name:** Vortex Mixer
- **Uses & Mechanism of action:**  
Provides smooth instant vortexing of even the largest sample sizes, including full 50ml tubes. The unique counter balance system creates maximum vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation.
- **Company:** Gemmy in dustrial crop



- **Name:** Vacuum pump
- **Uses & Mechanism of action:** to sterilize the prepared saline to use it on cells
- **Company:** Mass



- **Name:** Camera
- **Uses & Mechanism of action:** to evaluate the states of cell
- **Company:** اوتوسایننت





➤ **Name:** Laminar flow class I(Laminar flow work station)

➤ **Uses & Mechanism of action:**

A system of circulating filtered air in parallel-flowing planes. It reduces the risk of airborne contamination and exposure to chemical pollutants.

➤ **Company:** NUAIRE(Dia Soft)





- Art No.9040.0088 & class 3.1
- Art No.9040.0078 class 3.1

➤ **Name:** CO2 Incubator

➤ **Uses & Mechanism of action:**

Adjust PH of the culture media and also incubation for the cells.

**Company:** BINDER