**A) DNA Extraction – Typical workflow via kit purification**

**Centrifugation types**
- A) Floorstanding and benchtop centrifuges
- B) Mainly benchtop centrifuges

**Additional requirements**
- Temperature control (A)
- Flexibility of centrifuges (fixed-angle and swing-out rotors possibly required)
- Aerosol-tightness to avoid contaminations

**Rotor types**
- A) + B) Swing-out (mainly 96 well plates) and fixed-angle rotors (vessels with different sizes: 1.5 to 50 mL)

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**Source**

- Human tissue
- Suspension cells
- Animals
- Plants
- Bacteria

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**Centrifugation protocol (Cell) pelleting:**
- Human/Animals: 200–2,000 x g at RT-37 °C for 5 to 10 min.
- Plant: 1,000–2,000 x g at RT for 5–10 min.
- Bacteria: 1,000–10,000 x g at 4 °C for 10 min.
- Suspension cells: 250 x g at RT for 5 min.

**Centrifugation protocol (Cell) debris removal:**
- > 10,000 x g at RT for 1 min.

**Centrifugation protocol (Cell) washing:**
- > 10,000 x g at RT for 1 min.

**Centrifugation protocol (Cell) elution:**
- > 10,000 x g at RT for 1 min.

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**Cell concentration**

**Disruption (Cell lysis)**

**Cell concentration** → **Disruption (Cell lysis)** → **Cell debris**

**A) Swing-out (mainly 96 well plates) and fixed-angle rotors (vessels with different sizes: 1.5 to 50 mL)**