Pipetting Techniques

Best pipetting practice

1) Correct pipette-tip combination
Reduce errors by choosing a pipette-tip combination with the smallest possible air cushion.

2) Correct immersion depth
> Immerse as little as possible → preventing liquid transfer on the tip’s outside
> Immerse deeply enough to avoid uptake of air

3) Vertical pipette posture for liquid uptake
The hydrostatic pressure changes with the holding angle of the pipette.

4) Prewetting = Saturating of air cushion
Prewet tip at least three times to equilibrate air cushion to liquid.

5) Correct liquid discharge
> Discharge liquid by touching the wall of the target vessel → adhesion force of liquid
> Volumes below 10 µL: discharge directly into the liquid

6) Slow and continuous working pace
To ensure precise and accurate pipetting results

Forward and reverse pipetting

Transfer

Liquid uptake
1. Press operating button down to 1st stop
2. Let operating button move up completely

Liquid discharge
3. Press operating button via 1st stop down to 2nd stop
4. No liquid is left in tip after action

Observation

Reverse pipetting

1. Press operating button down to 2nd stop
2. Let operating button move up completely
3. Press operating button down to 1st stop
4. Liquid is left in tip after action (volume of blow-out)