

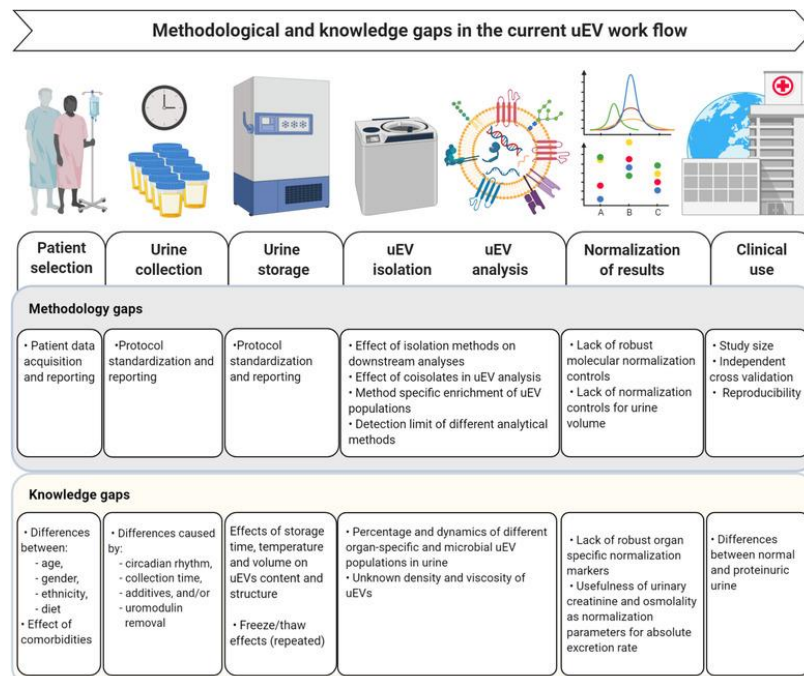
Urine Extracellular Isolation

Urine collection directly into sterile 50-ml plastic centrifuge tubes containing 4.2 ml of a protease inhibitor mixture

Sample centrifugation at $17,000 \times g$ for 15 min at 4°C to remove whole cells, large membrane fragments, and other debris.

two-step differential centrifugation method apply on samples :

centrifuged at $200,000 \times g$ for 1 h at 20°C (Optima XE-90 Ultracentrifuge, Beckman Coulter, Inc. CA; 70 Ti rotor). Followed by this, the supernatant was discarded, then $200,000 \times g$ for 1 h at 20°C again and the pellet was resuspended in $80 \mu\text{l}$ sterile phosphate-buffered saline (PBS, pH 7.2). These samples were divided into aliquots and kept at -80°C



Reference :

<https://doi.org/10.1002/jev2.12093>

<https://doi.org/10.1007/s11255-016-1408-7>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC516573/>