**标题**

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**摘要**

目的： 。方法： 。结果： 。结论： 。

**参考文献**

**个人简介**

照片

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**High-purified Isolation and Proteomic Analysis of Urinary Exosomes from Healthy Persons**

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**Abstract**

**Purposes：**Urinary exosomes containing specific biomarkers have recently been considered as novel potential non-invasive candidates for renal disease diagnosis. However, the development of urinary exosomes in basic research and their subsequent diagnostic application are impeded by the lack of an efficient isolation method. One of the main challenges during urinary exosomes isolation is how to remove a large number of Tamm Horsfall proteins (around 92 kDa) and other biological components from exosome enrichment mixture. Herein, we report a facile and low-cost isolation method for highly-purified human urinary exosomes based on dialysis. **Methods：**The key protocol for exosome isolation includes only two steps: (1) Healthy person urines were collected. 10 mL urine in 300 kDa dialysis tubes was firstly dialyzed in phosphate-buffered saline solution three times for sequential nine hours; (2) The dialysis suspension was concentrated to 200 μL by using 100 kDa ultracentrifuge tubes to achieve urinary exosome isolation. For verification, the concentrated solution was examined by western blot, transmission electronic microscopy, atomic force microscopy and qNano, which demonstrated the highly-purified urinary exosomes were present. Furthermore, a total of 359 proteins were identified by the proteomic analysis of purified urinary exosomes from healthy persons. **Results：**Those results demonstrated that highly-purified urinary exosomes could be achieved by our isolation method; 359 proteins were identified from healthy persons. **Conclusions：**Further works will focus on screening and identifying disease-related biomarkers from human urine exosomes for clinical diagnosis.

**Keywords:**Urinary exosomes; Hamm-horsfall protein; Dialysis; Proteomic analysis

**References**

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