



Conference Proceeding

# Comparison of Ultracentrifugation and Prekit-Exo Kit for the Identification of Exosomes Extracted from Serum of Gastric Cancer Patients

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**Presented:** 2018 Chinese Conference on Oncology. Shenyang, China, Aug. 17-19, 2018; **Published:** Oct. 18, 2018.

**Citation:** Xiaoqing Qian, Feng Xie, Wenxiu Hou, Tianliang Li, Fangfang Xia, and Daxiang Cui, Comparison of Ultracentrifugation and Prekit-Exo Kit for the Identification of Exosomes Extracted from Serum of Gastric Cancer Patients. *Nano Biomed. Eng.*, 2018, Special Issue: 318

## Abstract

**Objective:** To compare ultracentrifugation and Prekit-exo Kit in identifying the characteristics of exosomes extracted from Serum of breast cancer patients.

**Methods:** Serum samples were collected and extracted by ultra-high speed centrifugation (Ultra-exo) and Precipitation Kit (Prekit-exo) respectively. The biological morphology of exosome was observed by negative coloring matter with transmission electron microscopy, and the particle size and the distribution were detected by nano particle size tracking instrument (NTA). Results Bio-transmission electron microscopy, revealed that the morphologies in the ultracentrifugation-extracted exosomes were better than those in the Prekit-exo-extracted exosomes. Results showed that the number of the ultracentrifugation-extracted exosomes was more than that from the Prekit-exo-extracted exosomes. Also NTA (Nanoparticle Tracking Analysis) shows the number of ultracentrifugation-extracted exosomes is more than number of Prekit-exo-extracted exosomes. Western Blot results show that protein of exosomes obtained by Prekit-exo method are more and miscellaneous than Ultra-exo method.

**Conclusion:** Exosomes from Serum of breast cancer patients isolated by ultracentrifugation and precipitation are different in morphologies and numbers, and ultracentrifugation method is superior to precipitation method.

**Keywords:** Exosome; Ultracentrifugation; Kit; Precipitation

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