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Chemical Components Isolated from The Ethyl Acetate Extraction of The Roots of Radix *Actinidia Chinensis*

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Cancer is the second leading cause of death, responsible for almost one in six deaths globally. It is estimated that about 1,688,780 new cancer cases will be diagnosed in the United States in 2017 and 600,920 cancer cases are expected to die, which is about 1,650 people per day. For all sites combined, the cancer incidence rate is 20% higher in men than in women, while the cancer death rate is 40% higher [1]. It has been reported that 4,292,000 new cancer cases and 2,814,000 cancer deaths occurred in 2015 in China, with lung cancer being the most common incident cancer and the leading cause of cancer death. Stomach, esophageal, and liver cancers were also commonly diagnosed and were identified as leading causes of cancer death [2].

The aim of technological and scientific advances is to improve the survival and quality of life of people living with the disease. Oncology drug discovery and development remain a challenge for all scientists working in this field. Many kinds of Chinese traditional plant medicines have ever been used in clinical for treatment cancer. Thus it is a main stream to discovery the new drugs or drug candidates with the anticancer activity from the Chinese traditional plant medicines.

The Roots of Radix *Actinidia chinensis* has been reported to exhibit a wide spectrum of anticancer activity against several cancer cell lines [3]. During our previous work, we obtained different extractions (Ethylacetate extraction, Trichloromethane extraction, Dichloromethane extraction, Methanol extraction and water extraction) from the Roots of Radix *Actinidia chinensis* and evaluated their *in vitro* anticancer activity. The results showed that the ethyl acetate extraction exhibited higher anticancer activity against A549, HCT116 and MCF-7 cell lines at 50μg/mL [4]. Based on this study, we continue to isolate the single compounds from this extraction to make a foundation for its biological activity. In this work, we isolated and confirmed three know compounds (the names and structures showed in Figure 1) from the ethyl acetate extraction. The detailed isolation processes see to figure 2. The spectral data of isolated compounds are agreement well with the reported results [5] . The compounds 1 and 2 possess higher anticancer activity, [6-9] which explain the reason that the ethyl acetate extraction showed higher anticancer activity against A549, HCT116 and MCF-7 cell lines than other extraction in our previous study [4].

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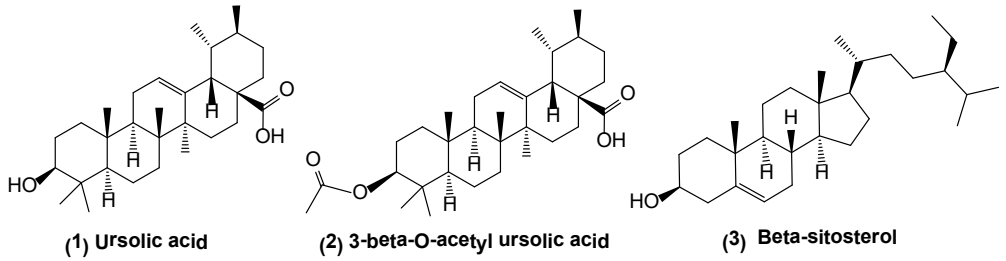

Figure 1. the names and structures of isolated compounds

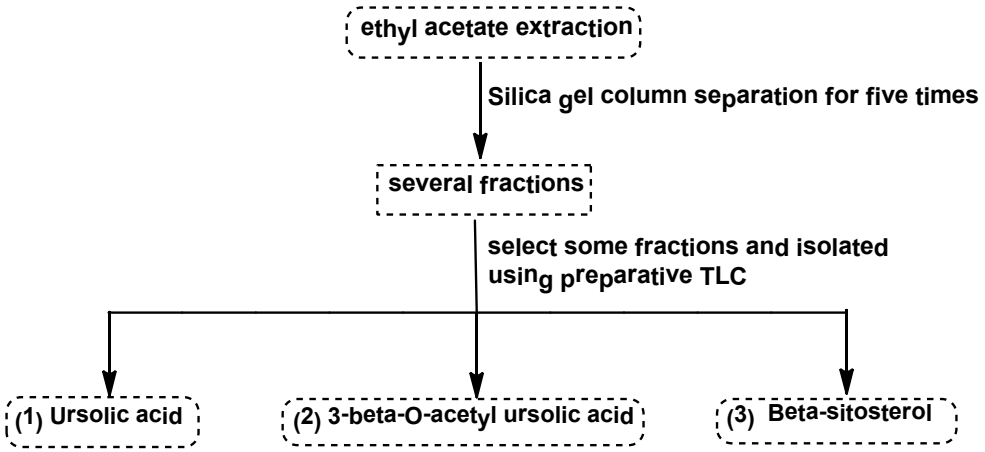

Figure 2. the detailed isolation processes compounds (1-3)

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