Determination of ginsenoside Rg3 and Rh2 in Korean red ginseng root

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Ginsenoside Rg3 and Rh2 are primarily found in Korean red ginseng root and valued for their bioactive properties. In spite of their potential anti-cancer properties, few studies have been reported concerning determination of ginsenoside Rg3 and Rh2 because they exist as minor ginsenosides. Reversed phase high performance liquid chromatography -pulsed amperometric detection (RP HPLC-PAD) has high sensitivity determination of glycosides selectivity for the including and ginsenosides. With a C18 column, the ginsenosides were separated efficiently using acetonitrile-water as mobile phase. PAD detected ionized sugar groups of ginsenoside structure in sodium hydroxide solution supplied as post column reagent. We quantified Rh2 and Rg3 from root extracts derived from Korean red ginseng root using our method.