Solid-phase extraction of liquiritin and glabridin from licorice according to ionic liquid-modified polymer

전명래, 염홍원, 노경호*
인하대학교
(rowkho@inha.ac.kr*)

In this work, liquiritin and glabridin from licorice were extracted by a new ionic liquid-modified polymer as sorbent materials in a solid-phase extraction (SPE) process. The ionic liquid-modified polymer was synthesized by using 1-methylimidazole, the cation group of some ionic liquid, to surface chemical modification of the poly(glycidyl methacrylate-co-ethylene goycol dimethacrylate) polymer. A solution of extract was utilized in the SPE cartridges following loading, washing, and elution procedures with water, acetonitrile, methanol, and water/methanol (v/v, containing acetic acid) as the solvents, respectively. Traditional C_{18}, blank polymer and ionic liquid-modified polymer as the sorbent in cartridges were compared and the recovery of the two compounds by the ionic liquid-modified polymer sorbent was much higher than other two materials.