

Supplementary material

For

Determination of naphazoline HCl, pheniramine maleate and their official impurities in eye drops and biological fluid rabbit aqueous humor by LC-DAD method

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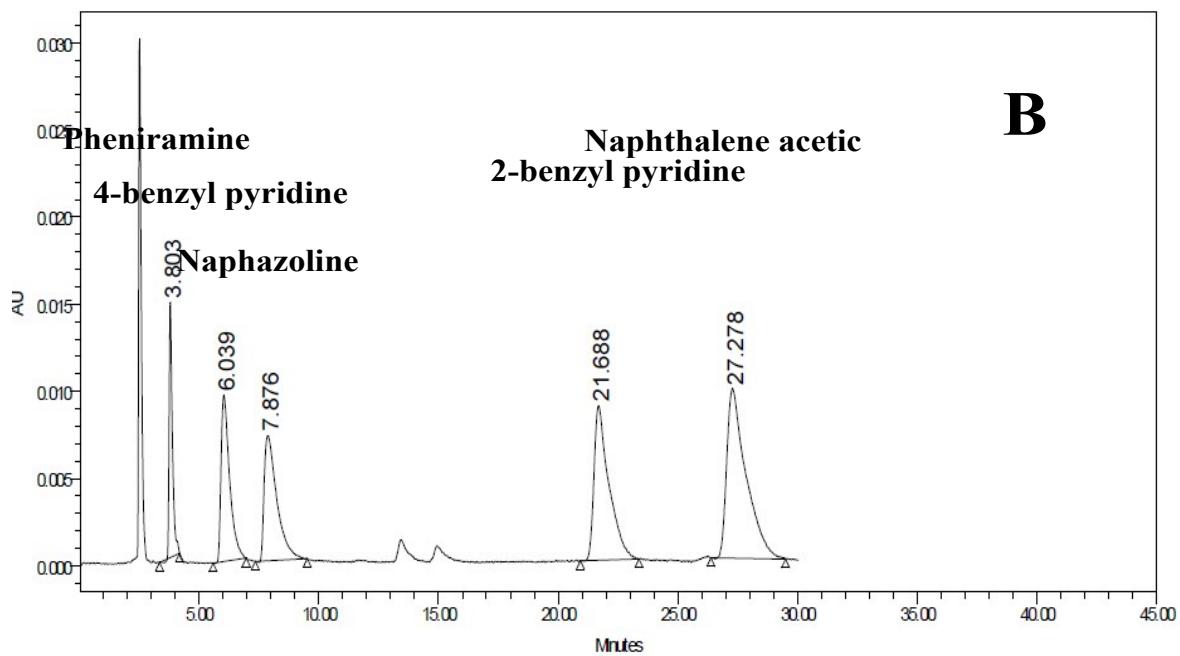
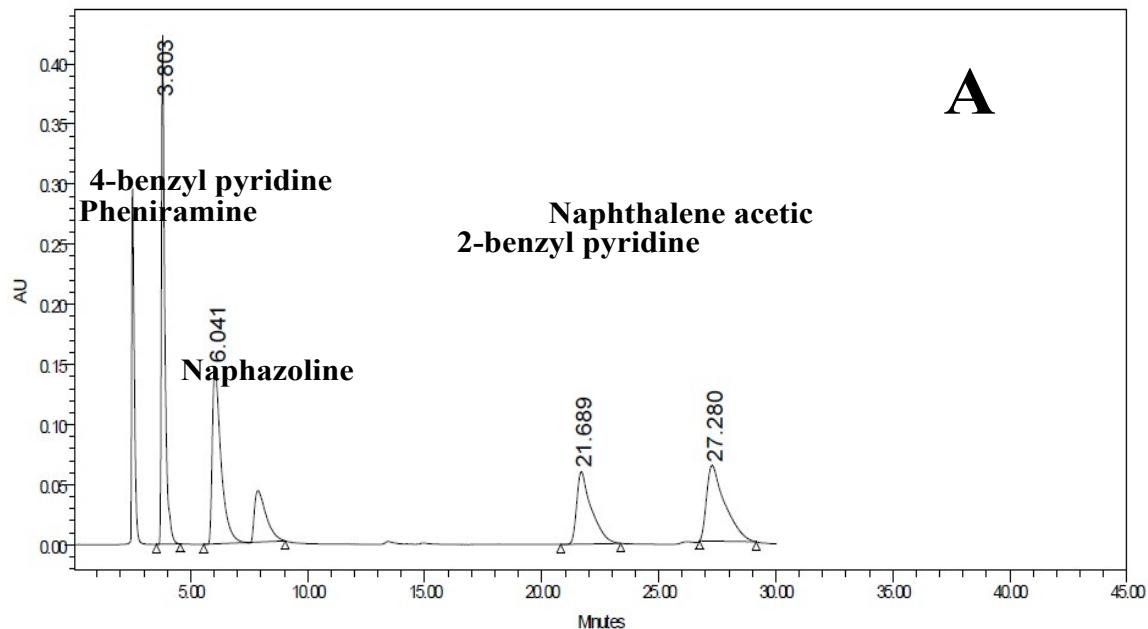
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Figure S1



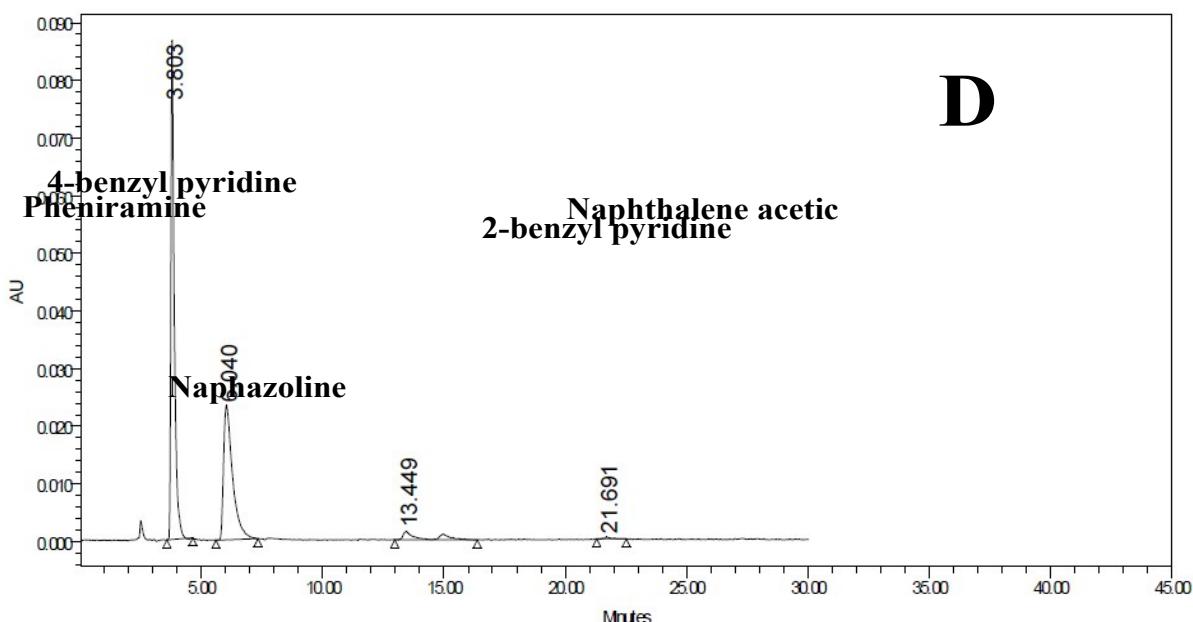
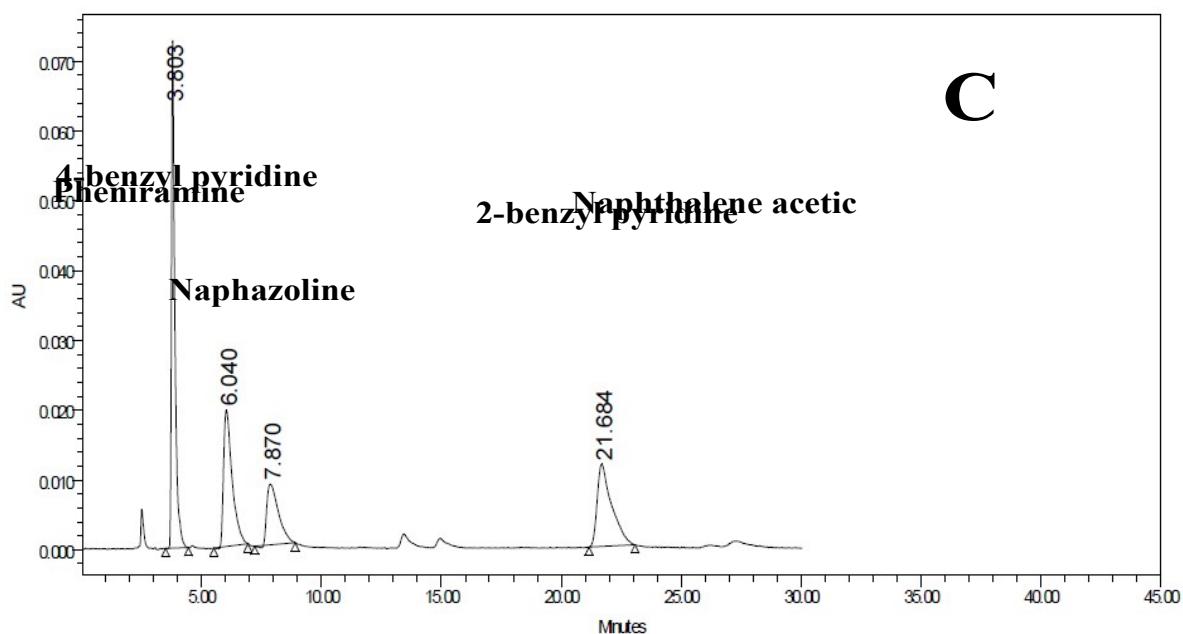
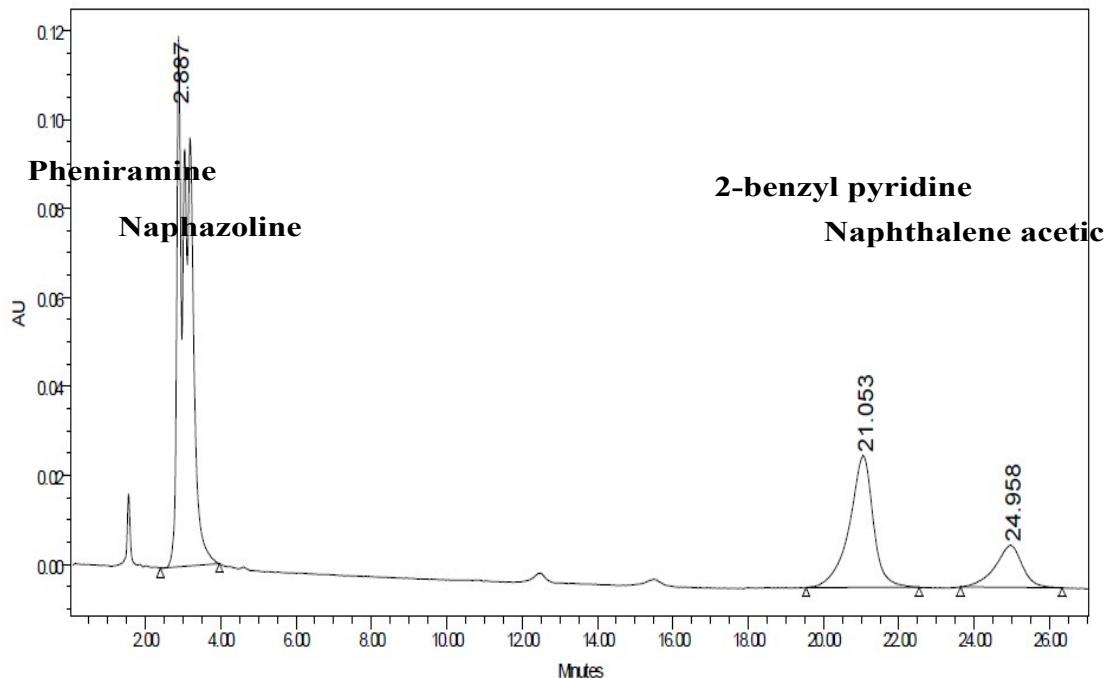


Figure S1. HPLC chromatograms of the five cited compounds using a hypersil ODS column (5 mm, 250-4.6 mm i.d.), mobile phase of pH 6.0 phosphate buffer: acetonitrile (70: 30, by volume), flow rate of 1.0 mL min^{-1} and detection at wave length; 210 nm (A); 240 nm (B), 270 nm (C) and 280 nm (D) show lower peak response than the detection at 260 nm of the same concentration.

Figure S2

A

4-benzyl



B

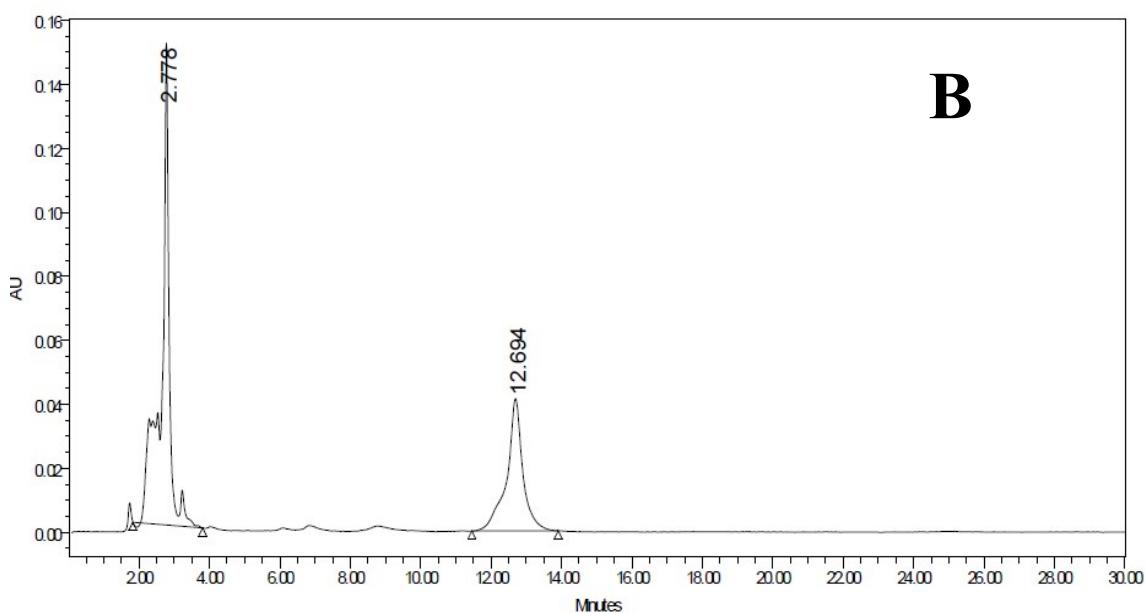


Figure S2. HPLC chromatograms of the five cited compounds using mobile phase of pH 6.0 phosphate buffer: acetonitrile (70: 30, by volume), flow rate of 1.0 mL min^{-1} , detection at 260 nm, CN column (5 mm, 250- 4.6 mm i.d.) (A) and C8 column (5 mm, 250- 4.6 mm i.d.) (B), show lower separation efficiency than the used hypersil ODS column (5 mm, 250- 4.6 mm i.d.).

Figure S3

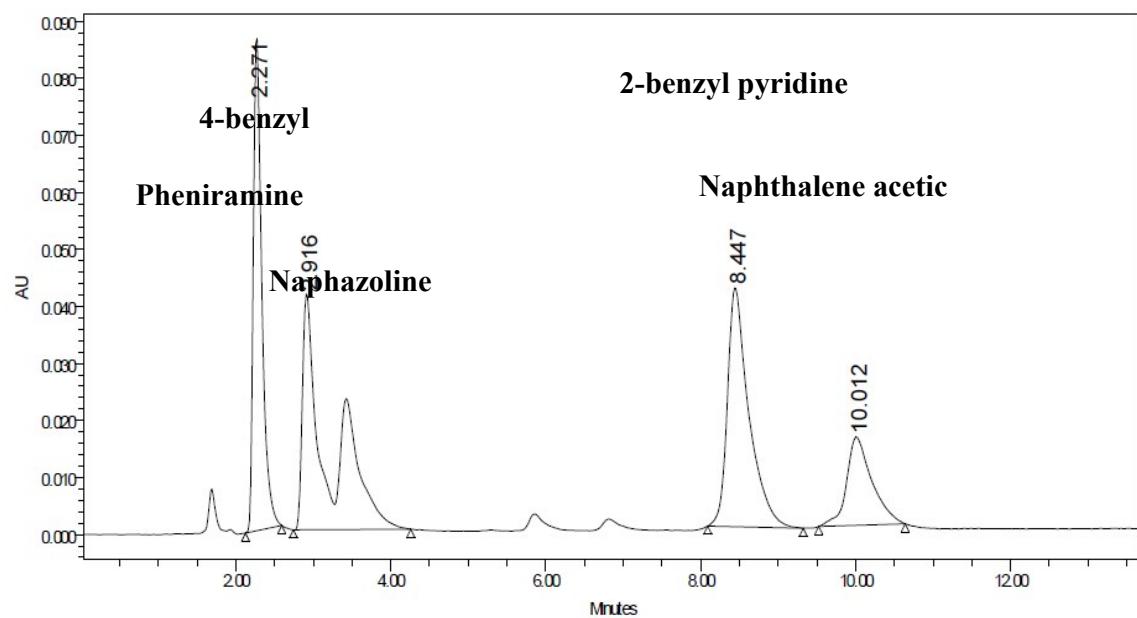


Figure S3. HPLC chromatogram of the five cited compounds using a hypersil ODS column (5 mm, 250-4.6 mm i.d.), mobile phase of pH 6.0 phosphate buffer: acetonitrile (50: 50, by volume), flow rate of 1.0 mL min⁻¹ and detection at 260 nm shows lower separation efficiency than the used mobile phase phosphate buffer: acetonitrile (70: 30, by volume)

Figure S4

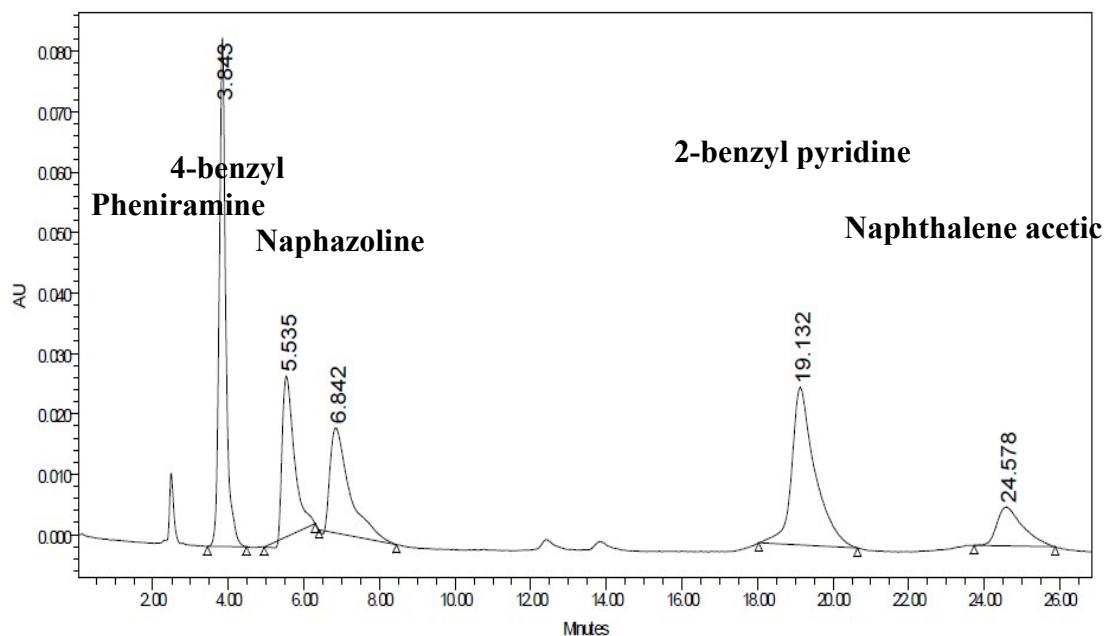
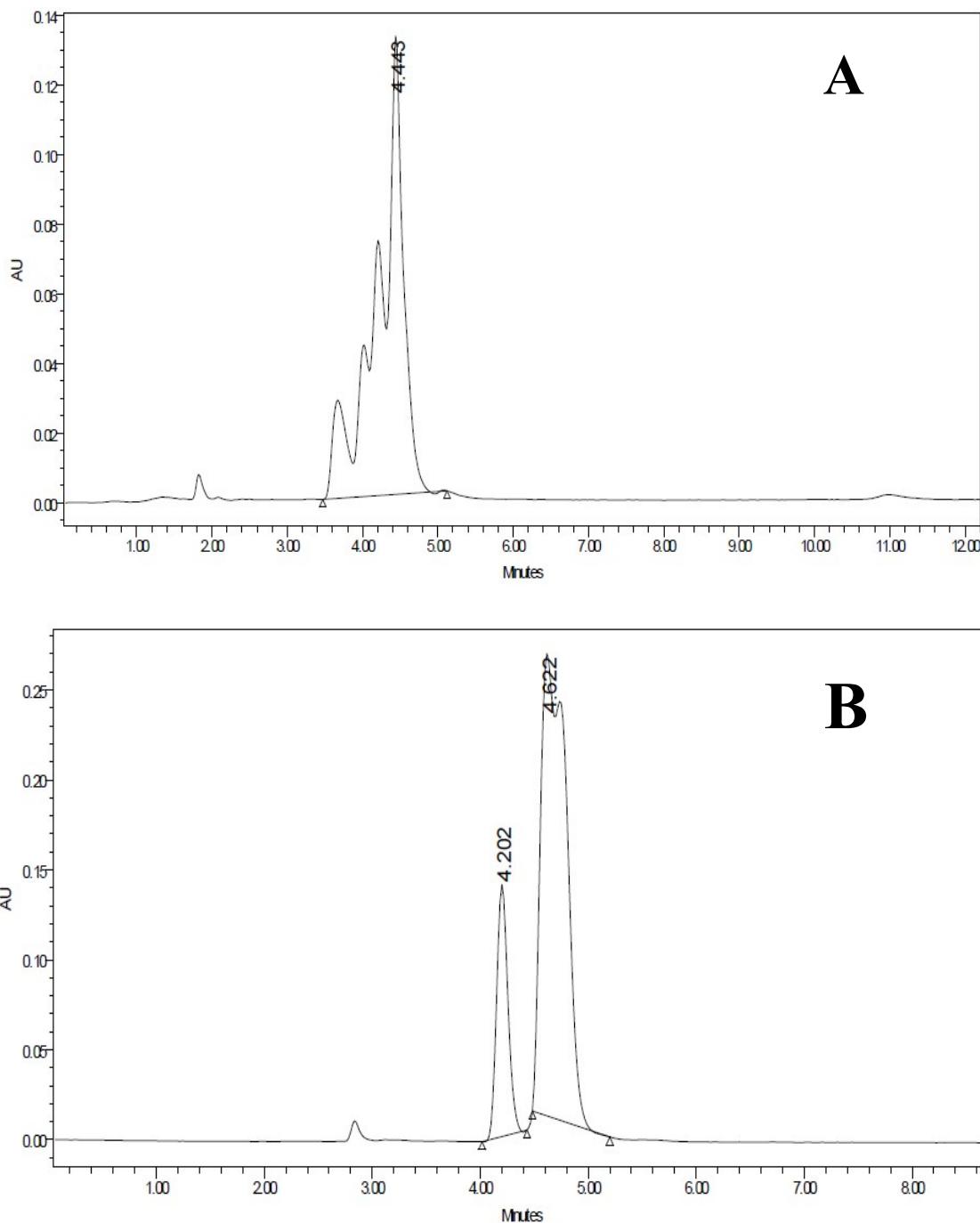


Figure S4. HPLC chromatogram of the five cited compounds using a hypersil ODS column (5 mm, 250-4.6 mm i.d.), mobile phase of pH 3.0 phosphate buffer: acetonitrile (70: 30, by volume), flow rate of 1.0 mL min⁻¹ and detection at 260 nm shows lower system suitability (theoretical plate and tailing factor) than the used mobile phase of pH 6.0.

Figure S5



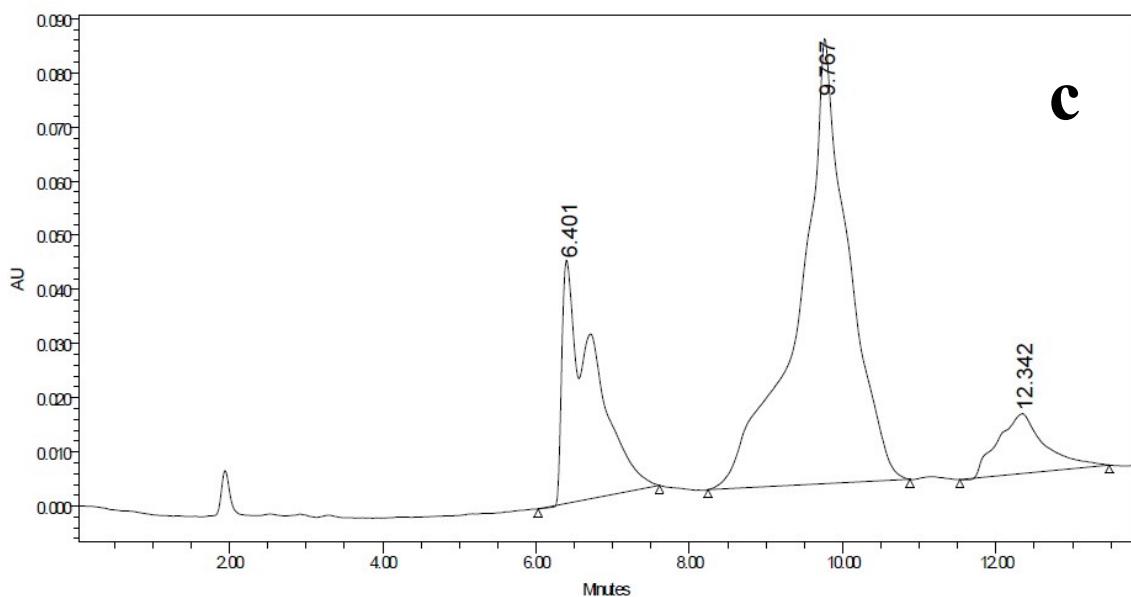


Figure S5. HPLC chromatograms of the five cited compounds using a hypersil ODS column (5 mm, 250-4.6 mm i.d.), flow rate of 1.0 mL min^{-1} , detection at wave length 260 nm and mobile phase of pH 6.0 acetate buffer: acetonitrile with ratio; (40: 60, by volume) (A); (70: 30, by volume) (B) and (95: 5, by volume) (C) show lower peak separation efficiency than the separation using mobile phase of pH 6.0 of phosphate buffer: acetonitrile (70: 30, by volume).