

Selection of columns

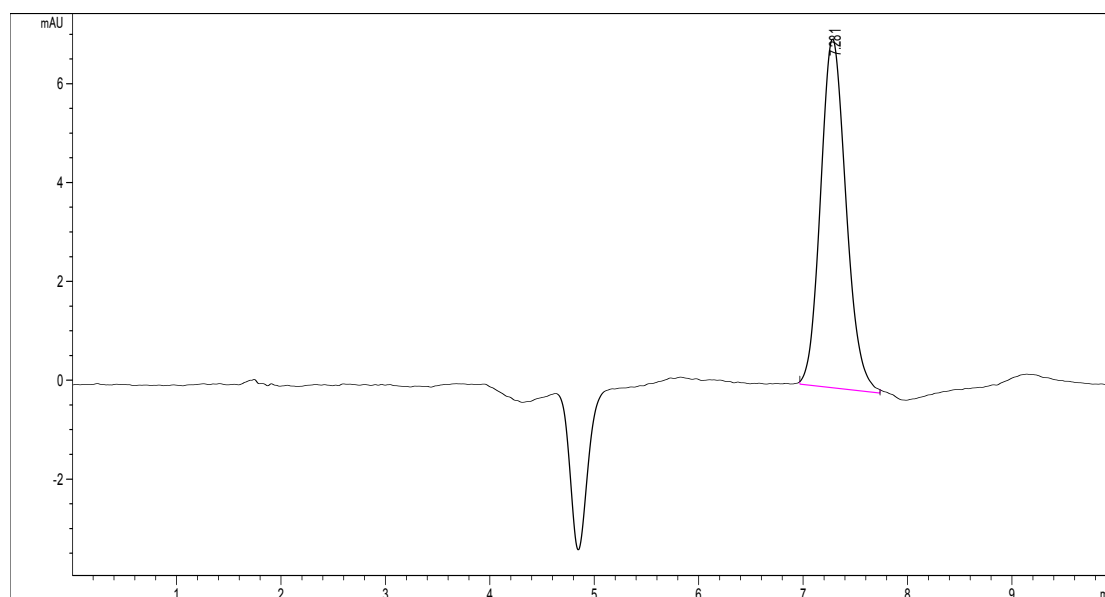


Fig.1 Chromatogram of SM-1 dissolved in methanol obtained from Agilent AQ-C18 column.

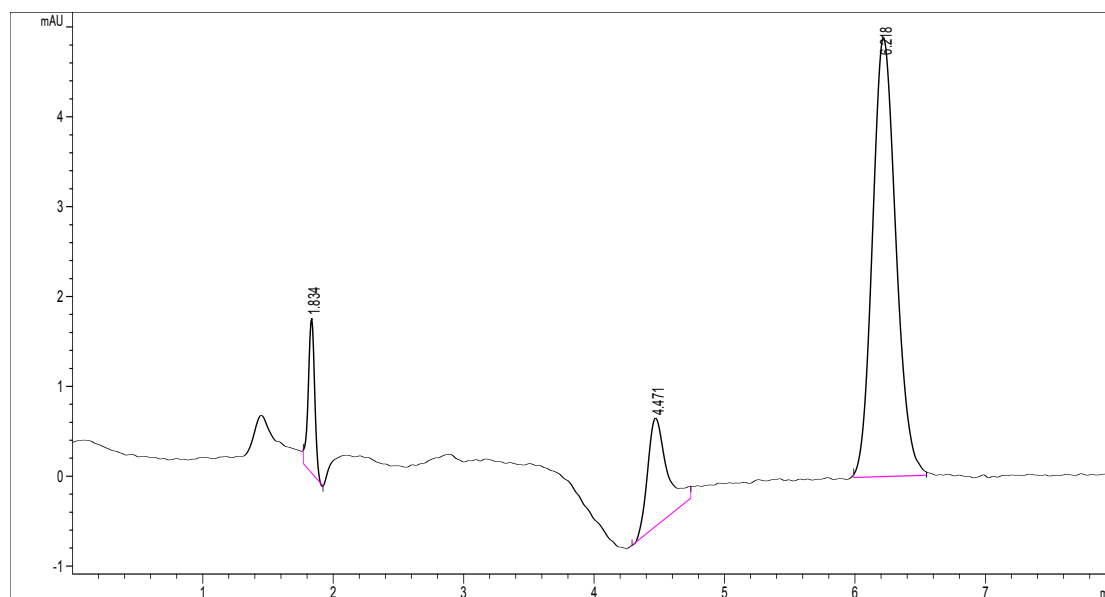


Fig.2 Chromatogram of blank rat plasma spiked with SM-1 and gefitinib obtained from Thermo Hypurity C18.

Selection of internal standards

Chromatographic conditions: The mobile phase consisted of acetonitrile-10mM potassium hydrogen phosphate solution (pH 7.0, adjusted by 10%

phosphoric acid) in a ratio 65:35 (v/v) at 1.0 mL/min flow-rate.

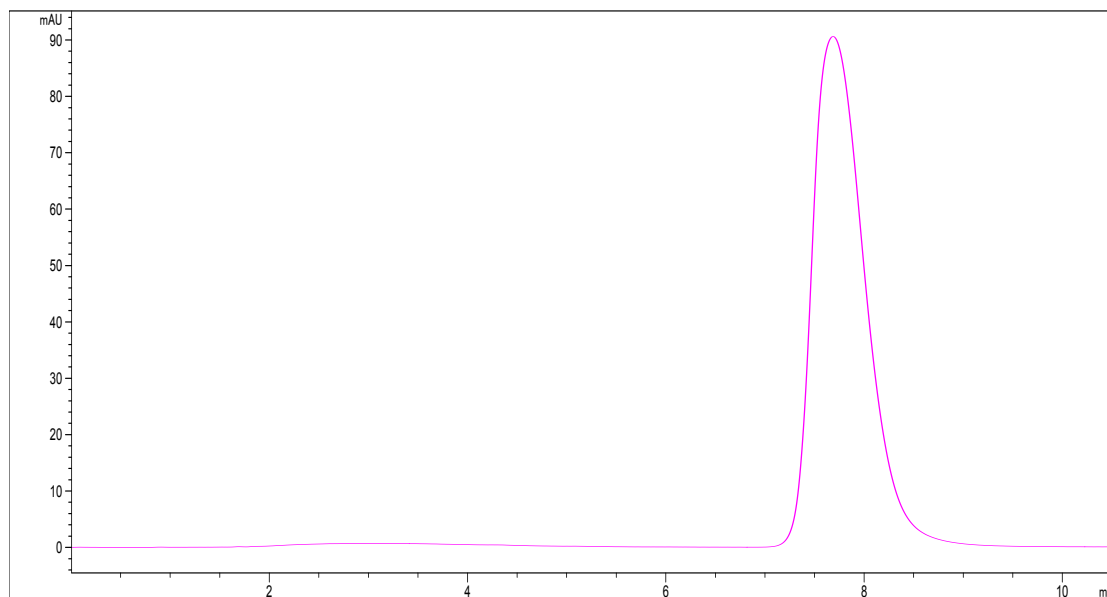


Fig.3 Chromatogram of naproxen dissolved in methanol

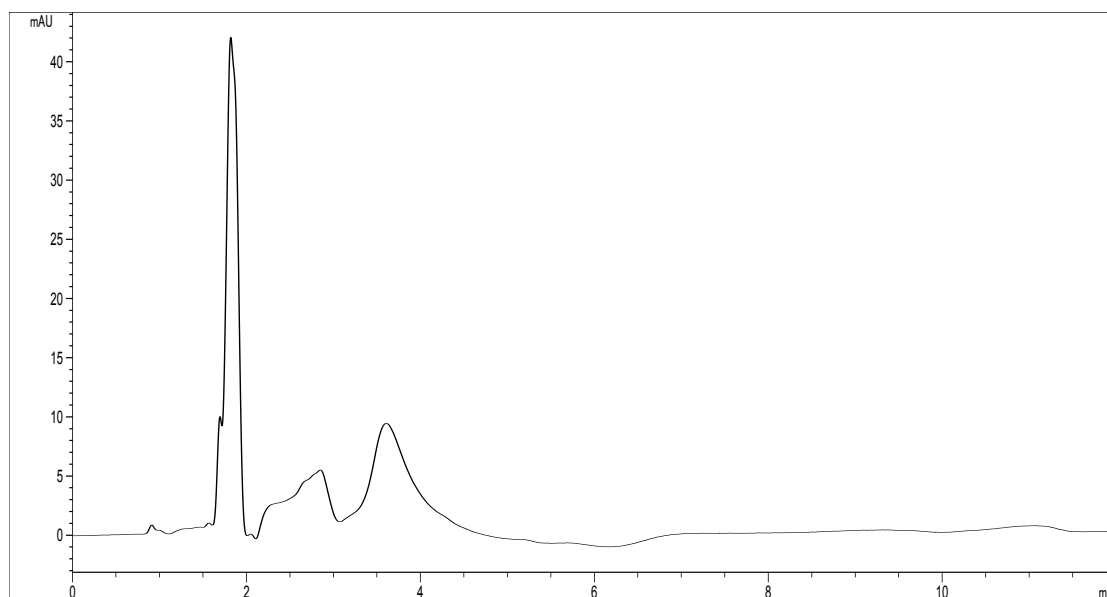


Fig.4 Chromatogram of tinidazole dissolved in methanol

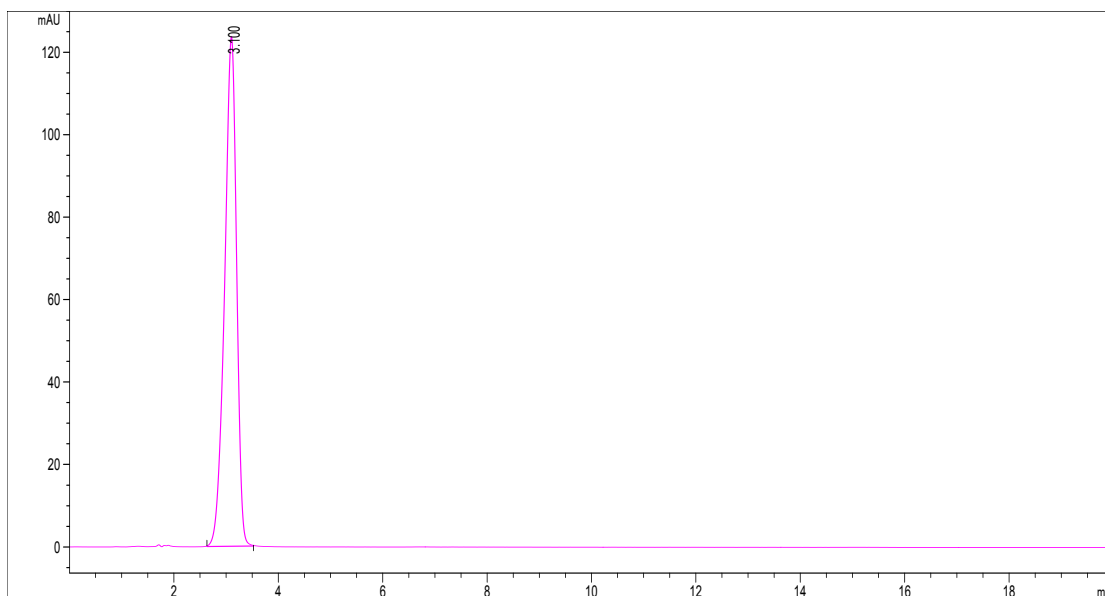


Fig.5 Chromatogram of zidovudine dissolved in methanol

Selection of mobile phases

Chromatographic conditions: The mobile phase consisted of methanol-10mM potassium hydrogen phosphate solution (pH 7.0, adjusted by 10% phosphoric acid) in a ratio 80:20 (v/v) at 1.0 mL/min flow-rate.

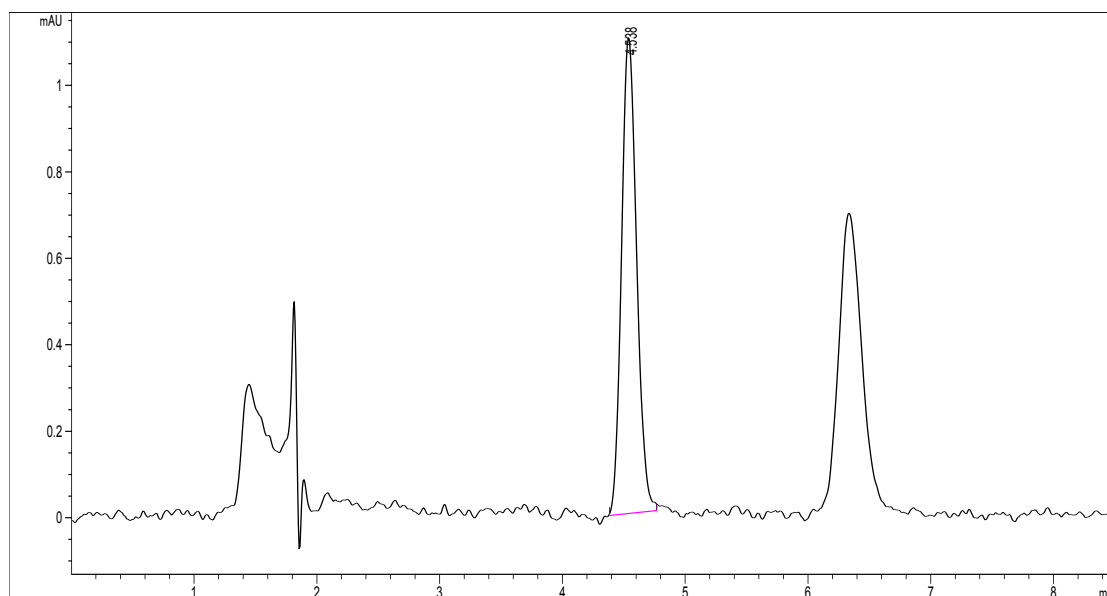


Fig.6 Chromatogram for blank rat plasma spiked with SM-1 and gefitinib.

In this condition, SM-1 and gefitinib were well separated from the interferences, but the signal intensity is low than that of the mobile phase

consisted of acetonitrile-10mM potassium hydrogen phosphate solution.

Chromatographic conditions: The mobile phase consisted of acetonitrile-10mM potassium hydrogen phosphate solution (pH 7.0, adjusted by 10% phosphoric acid) in a ratio 65:35 (v/v) at 1.0 mL/min flow-rate.

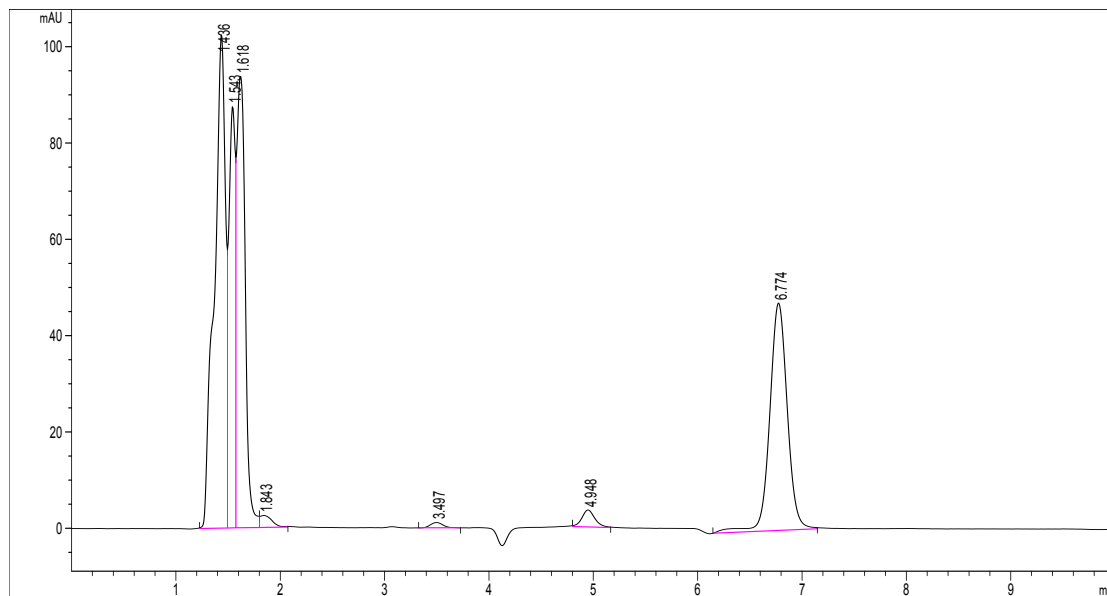


Fig.7 Chromatogram for blank rat plasma spiked with SM-1 and gefitinib.

Chromatographic conditions: The mobile phase consisted of acetonitrile-10mM potassium hydrogen phosphate solution (pH 7.0, adjusted by 10% phosphoric acid) in a ratio 63:37 (v/v) at 1.0 mL/min flow-rate.

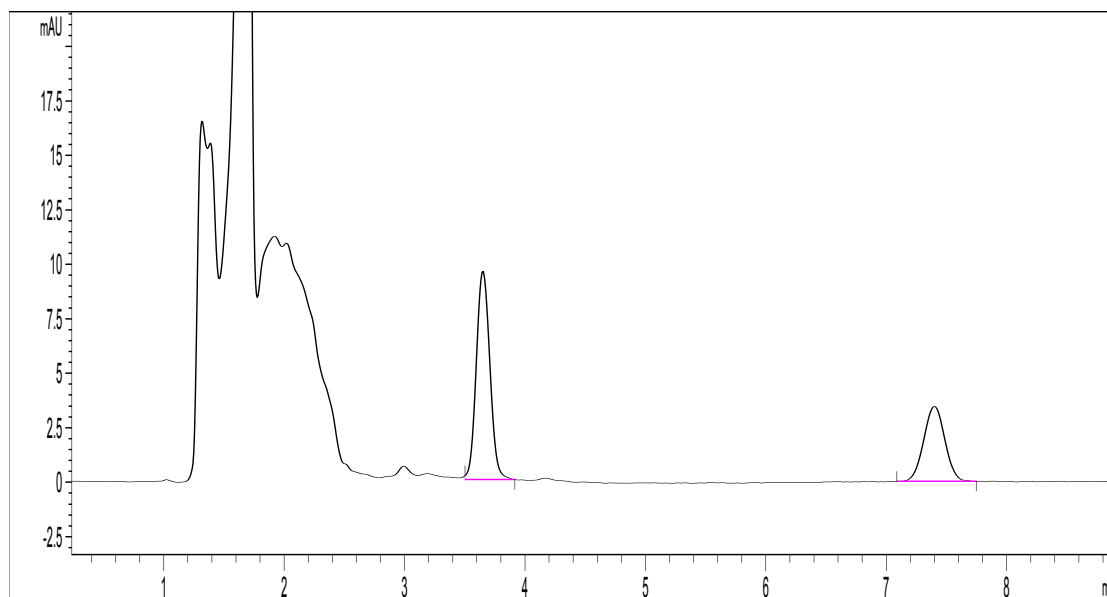


Fig.8 Chromatogram for blank rat plasma spiked with SM-1 and gefitinib.

Decreasing the amount of acetonitrile in the mobile phase significantly increased the retention time of SM-1, but did not produce a considerable shift in the retention time of gefitinib.

Chromatogram for blank plasma

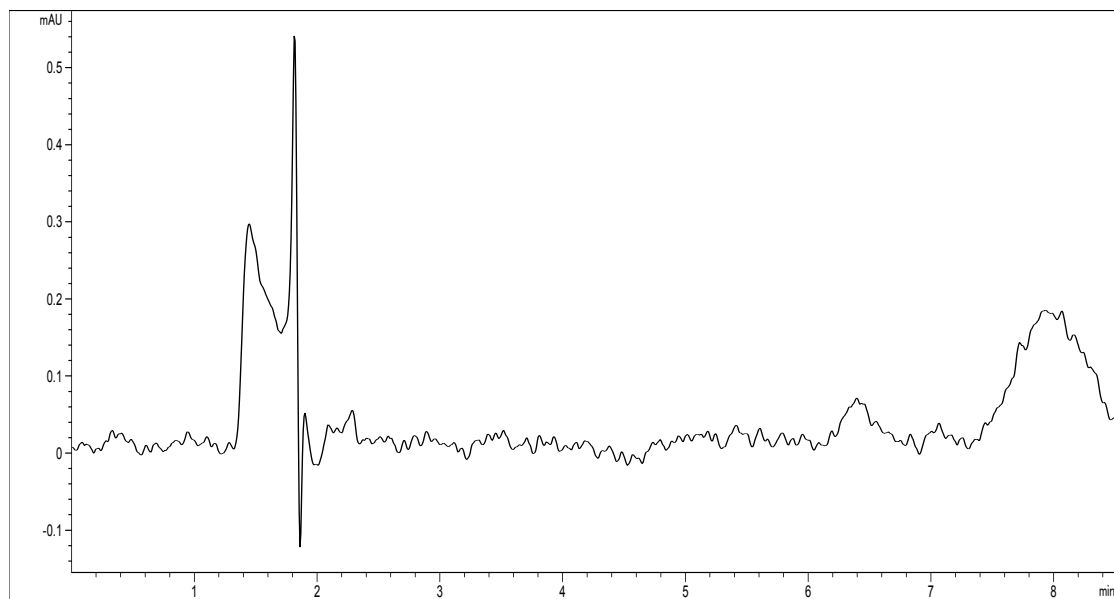


Fig. 9 Chromatogram for blank plasma obtained from direct deproteinization using acetonitrile