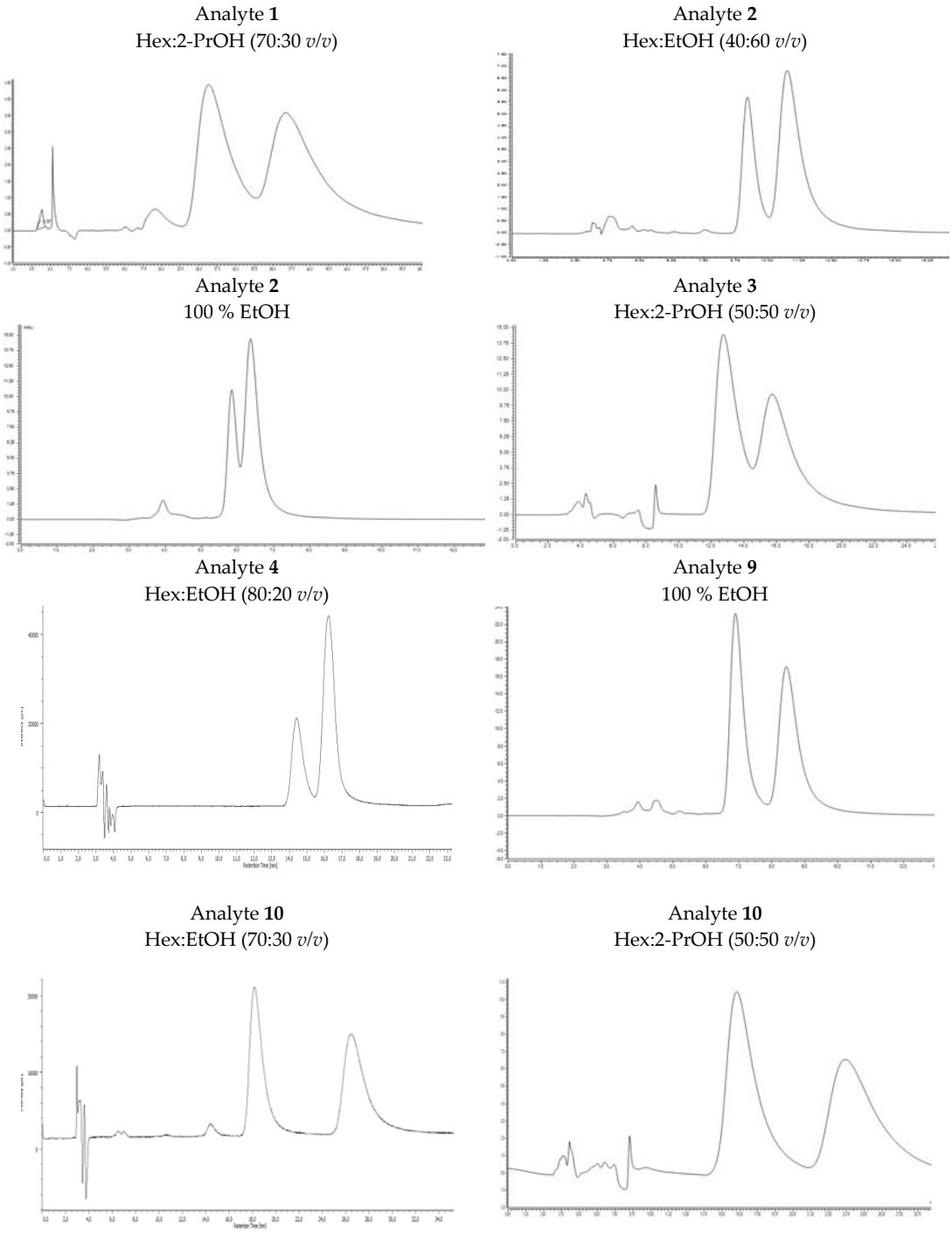
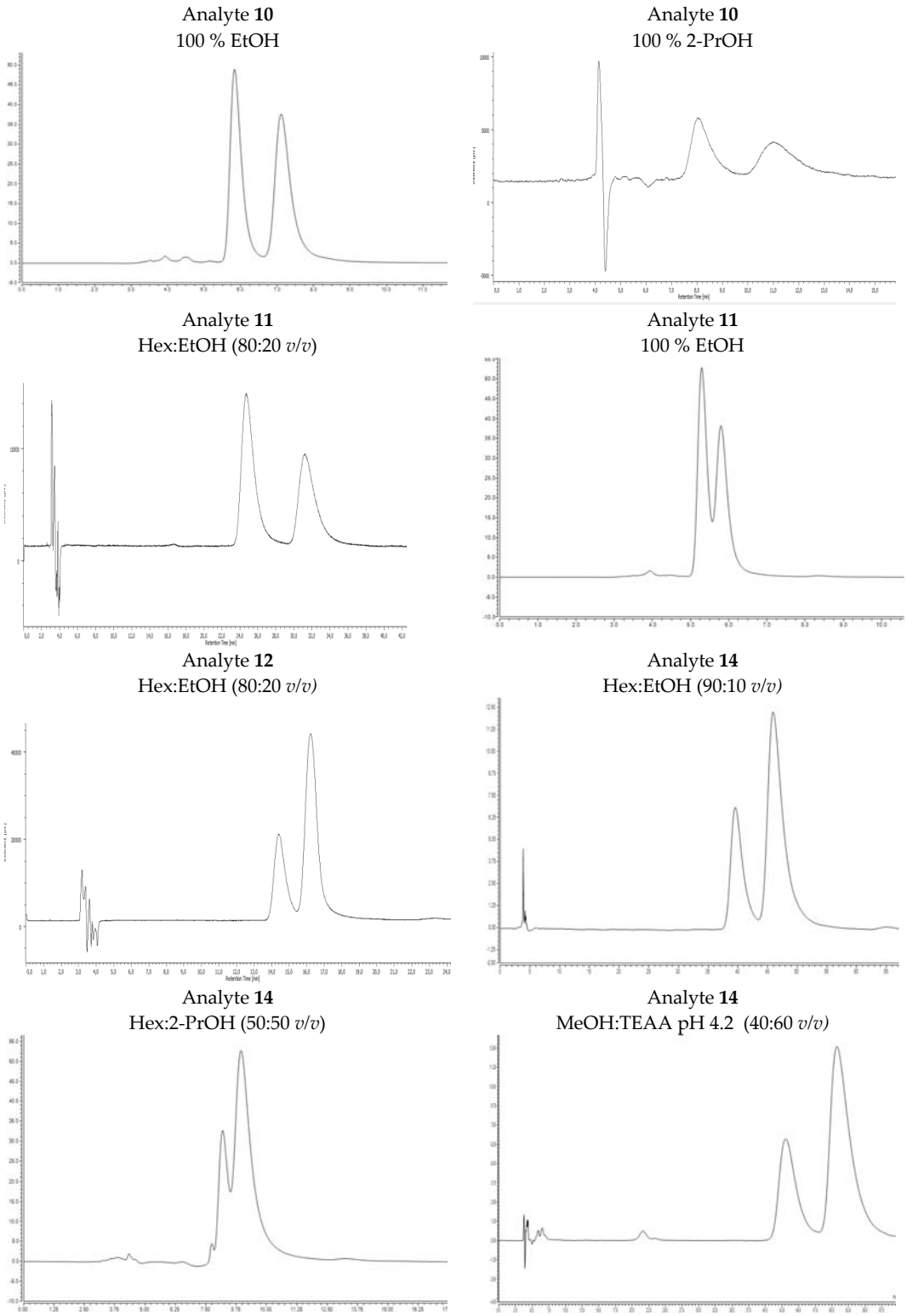
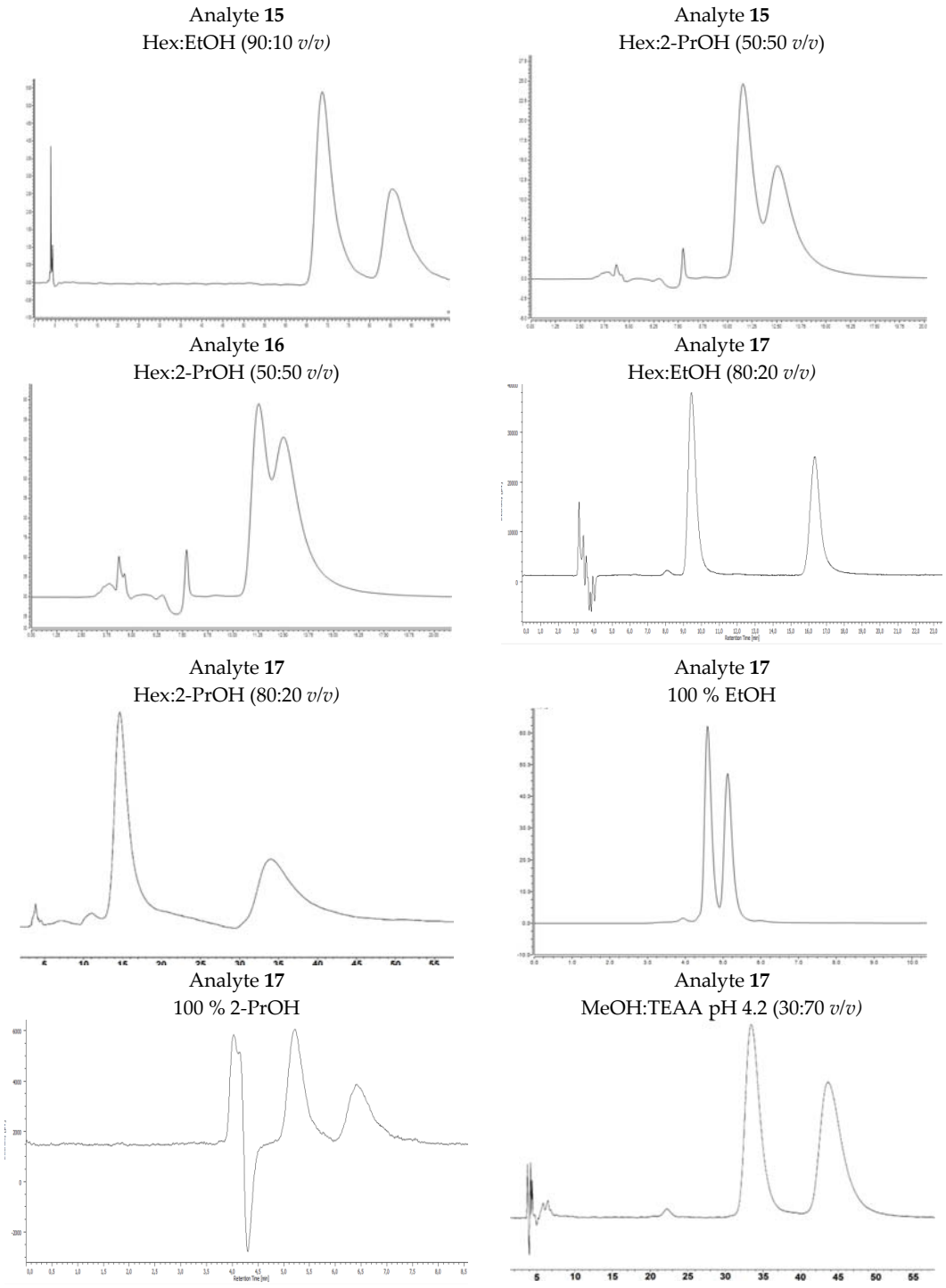
Supplementary Material:



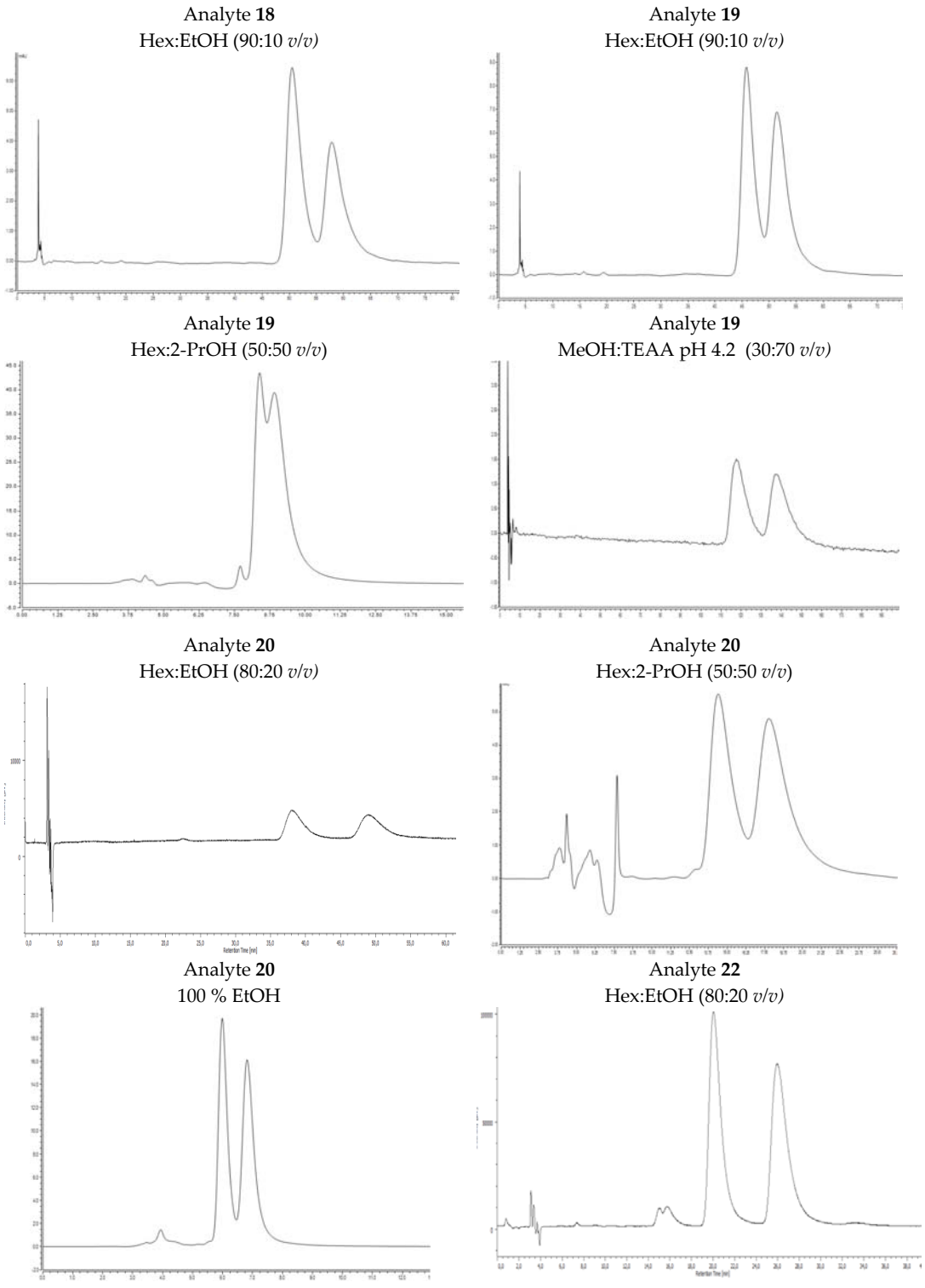
SFigure 1: Chromatograms for the enantioseparation of analytes **1-4, 9** and **10** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



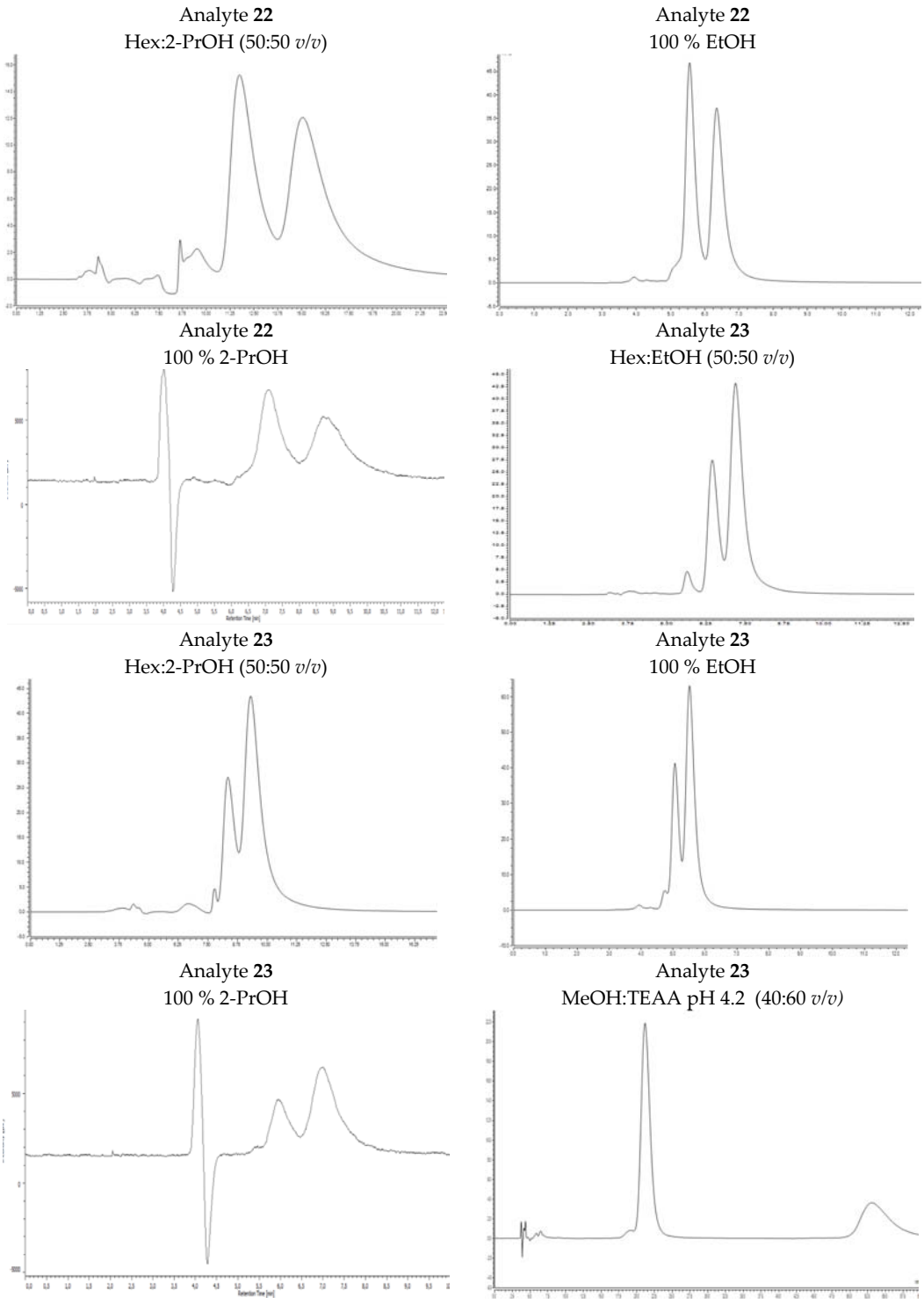
SFigure 2: Chromatograms for the enantioseparation of analytes **10-12** and **14** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



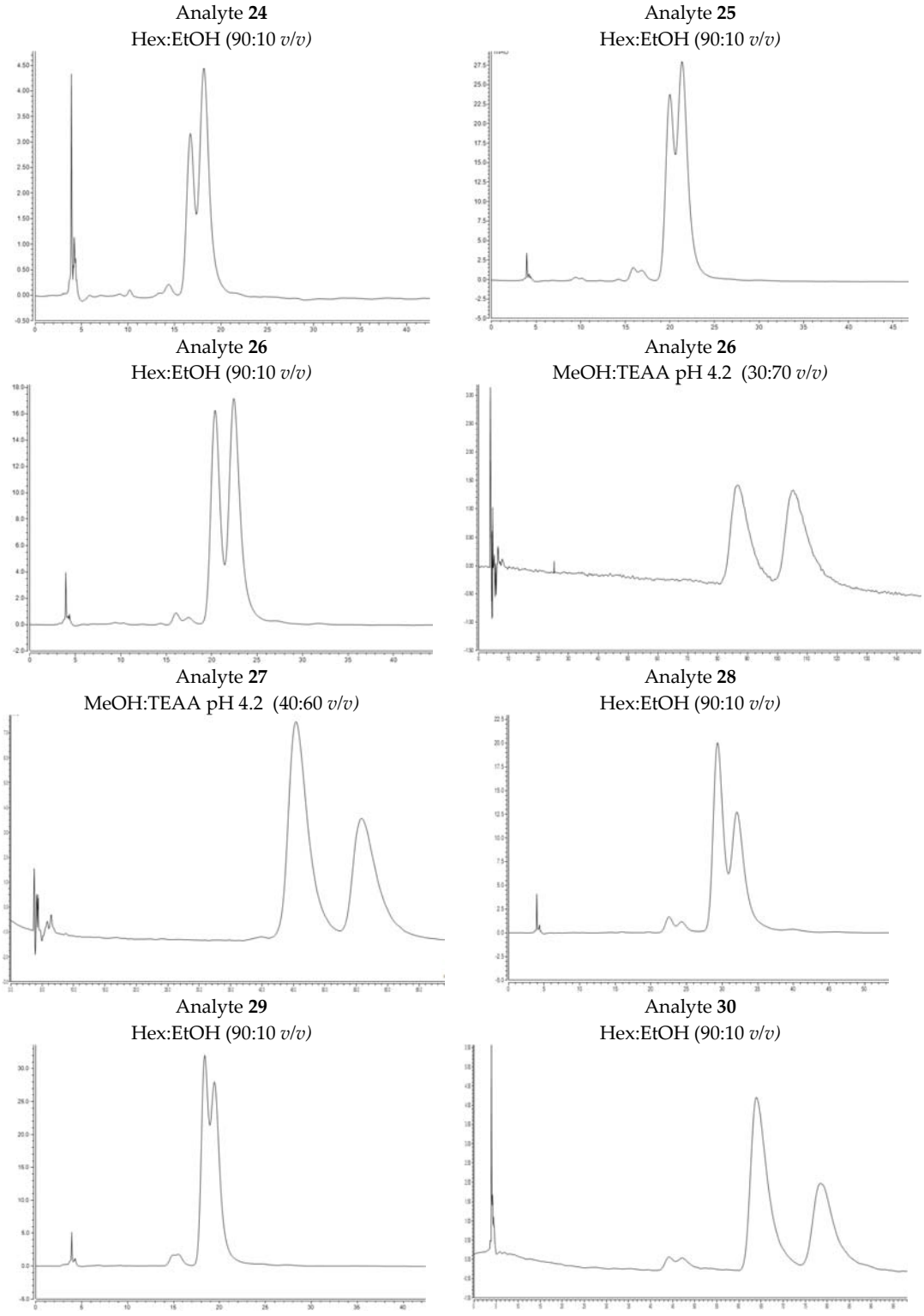
SFigure 3: Chromatograms for the enantioseparation of analytes **15-17** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



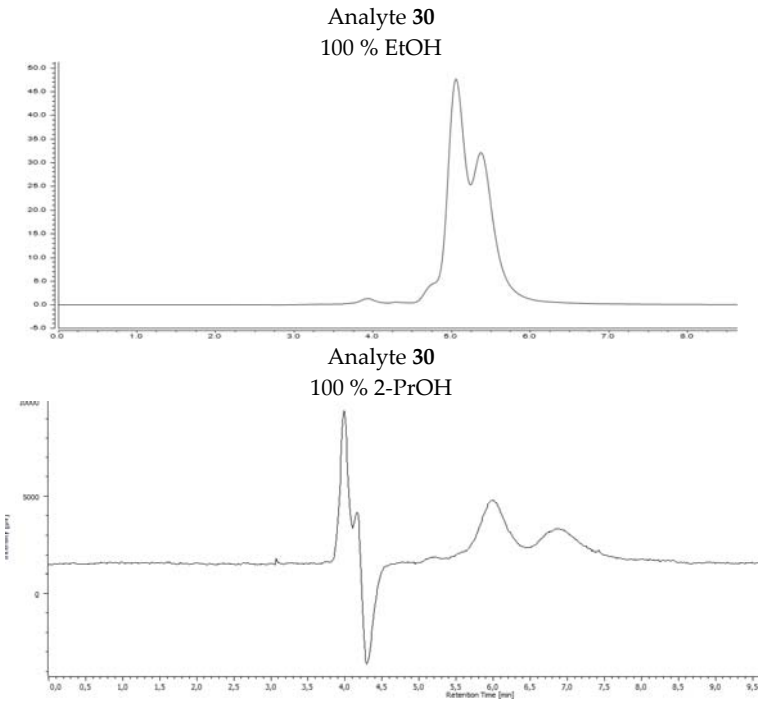
SFigure 4: Chromatograms for the enantioseparation of analytes **18-20** and **22** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



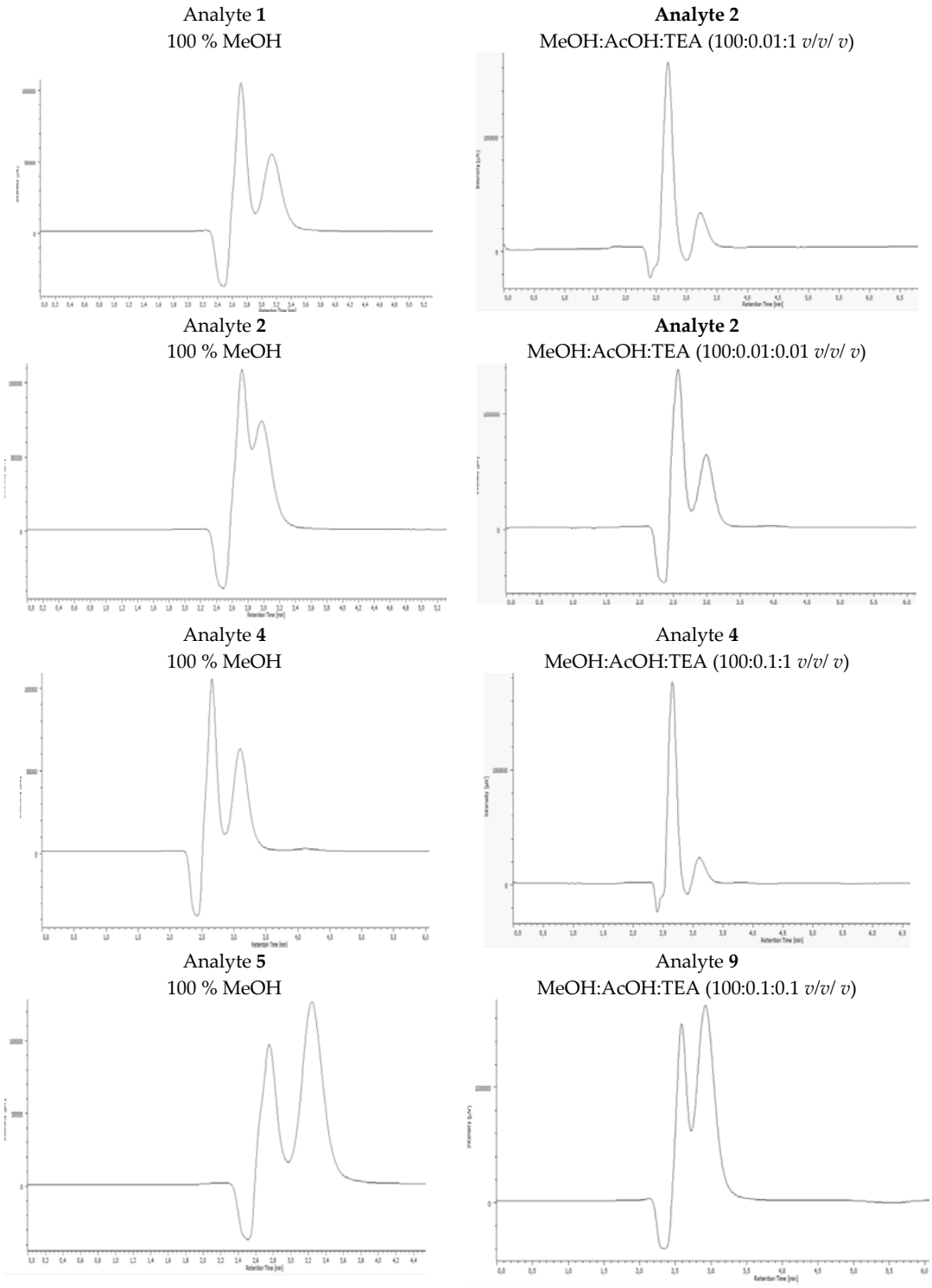
SFigure 5: Chromatograms for the enantioseparation of analytes **22** and **23** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



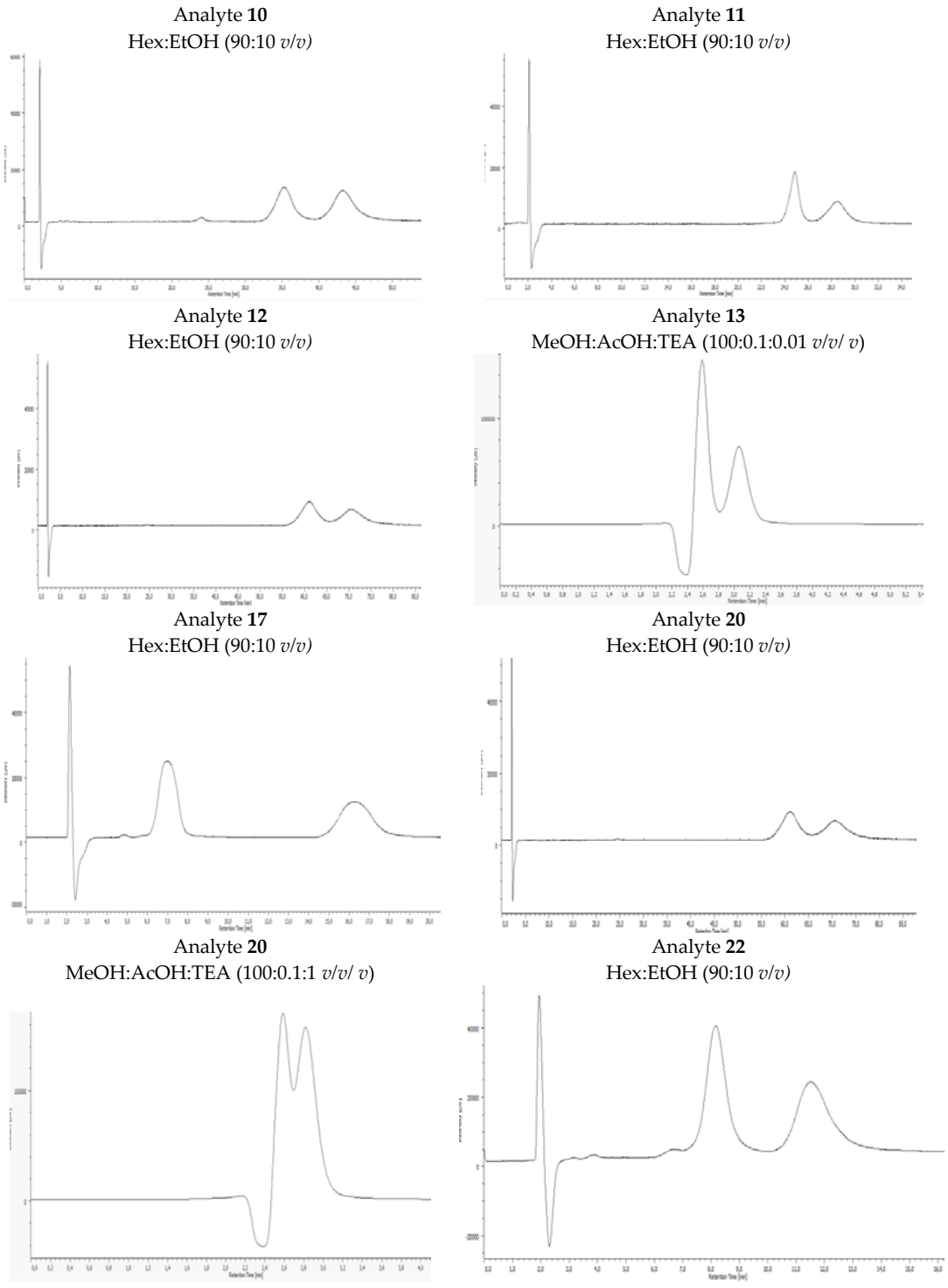
SFigure 6: Chromatograms for the enantioseparation of analytes **24-30** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



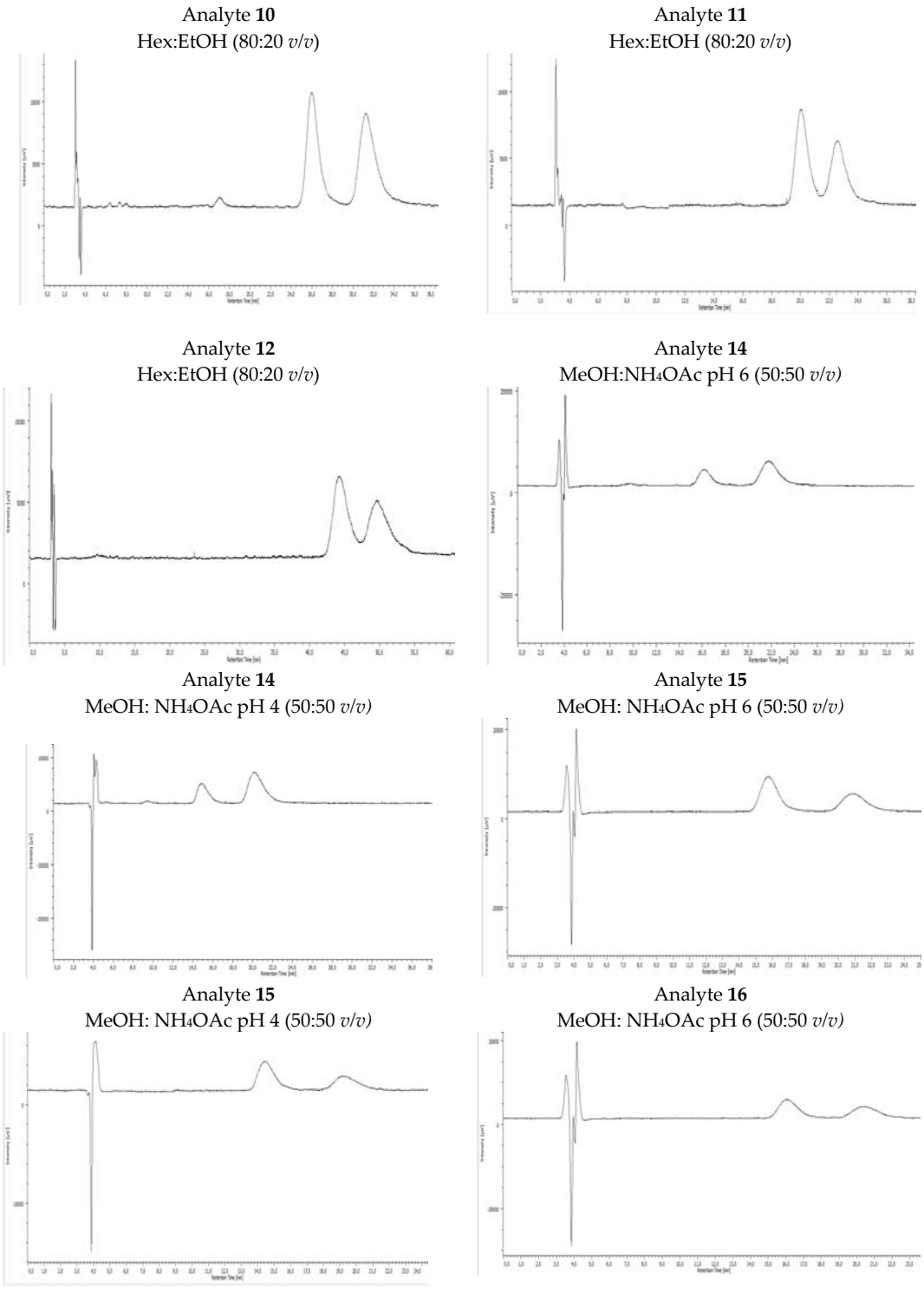
SFigure 7: Chromatograms for the enantioseparation of analytes **30** on Chirobiotic T column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.



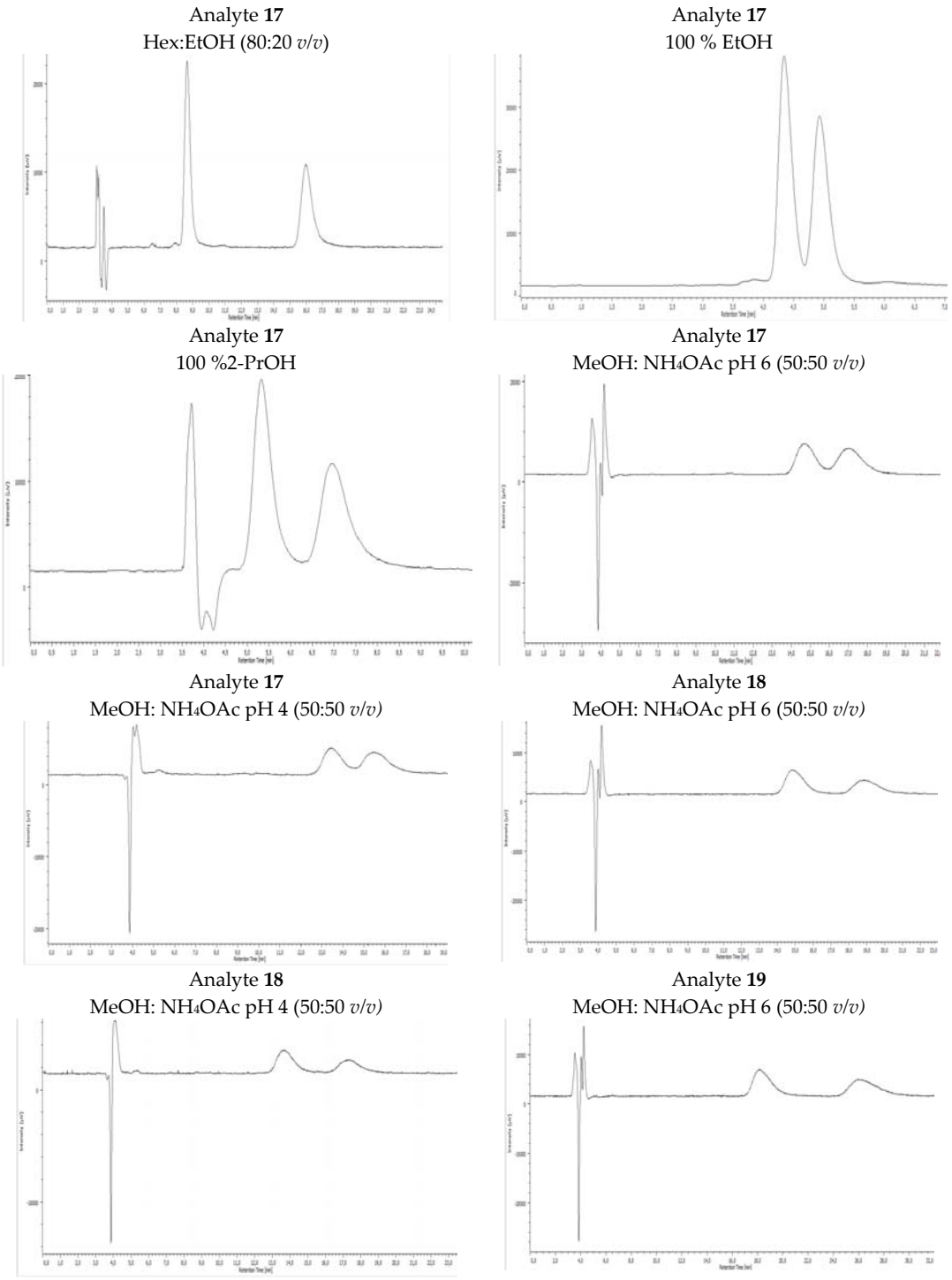
SFigure 8: Chromatograms for the enantioseparation of analytes **1,2,4,5** and **9** on Chirobiotic R column using different mobile phases. Chromatographic conditions: Flow rate: 0.2 mL/min, UV detection at 254 nm.



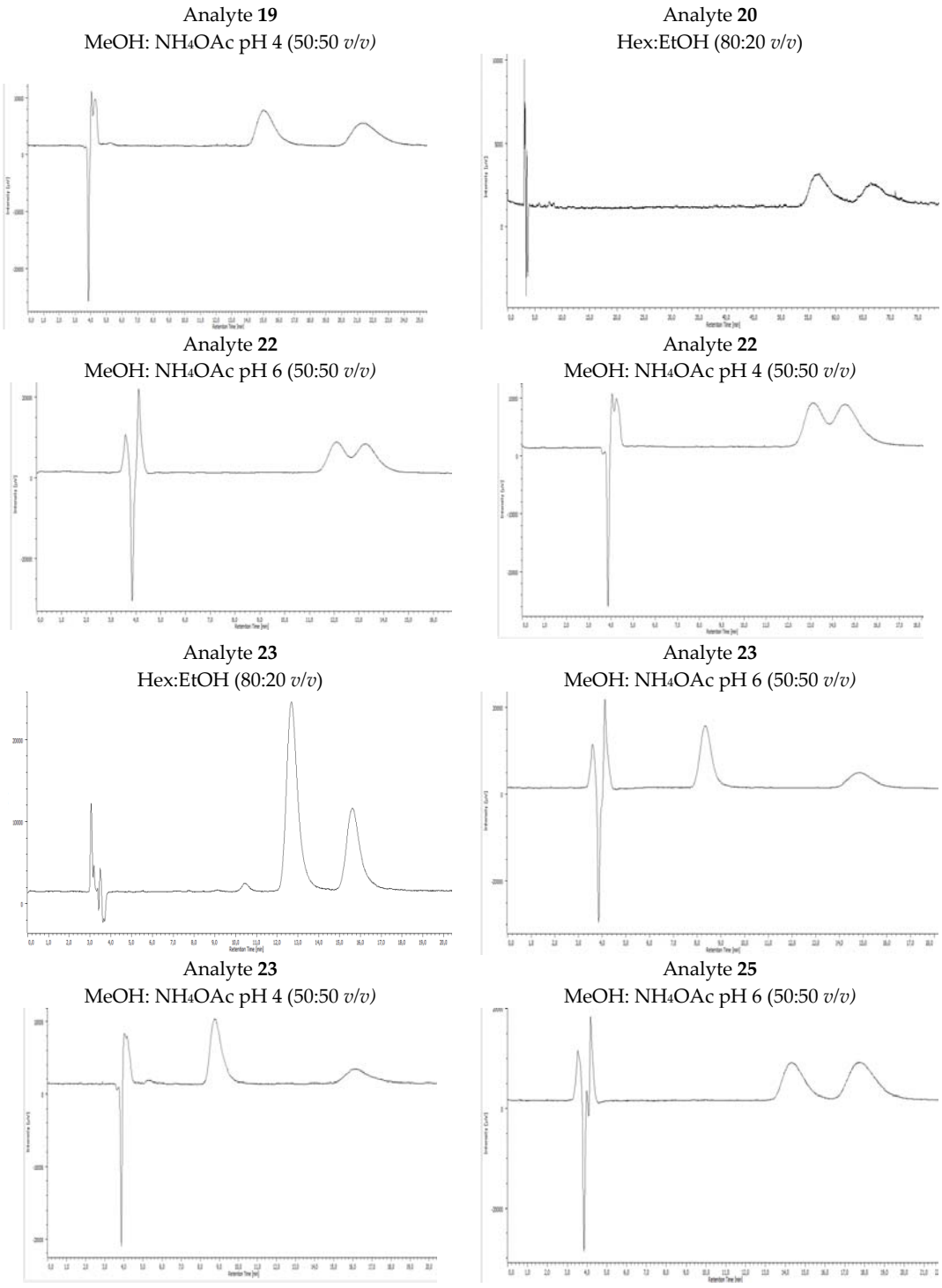
SFigure 9: Chromatograms for the enantioseparation of analytes **10-13, 17, 20** and **22** on Chirobiotic R column using different mobile phases. Chromatographic conditions: Flow rate: 0.2 mL/min, UV detection at 254 nm.



SFigure 10: Chromatograms for the enantioseparation of analytes **10, 11, 12, 14, 15** and **16** on Chirobiotic V column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.

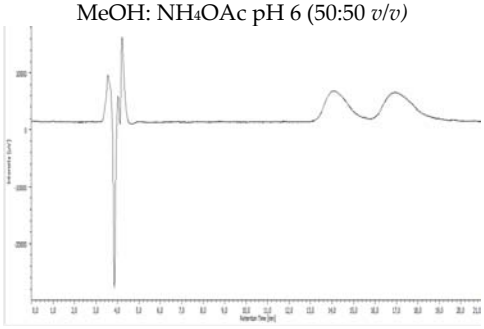


SFigure 11: Chromatograms for the enantioseparation of analytes **17-19** on Chirobiotic V column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.

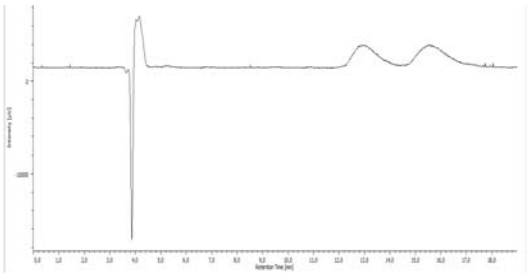


SFigure 12: Chromatograms for the enantioseparation of analytes **19, 20, 22, 23** and **25** on Chirobiotic V column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.

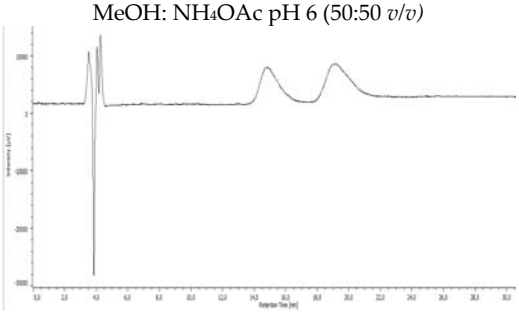
Analyte **26**
MeOH: NH_4OAc pH 6 (50:50 *v/v)*



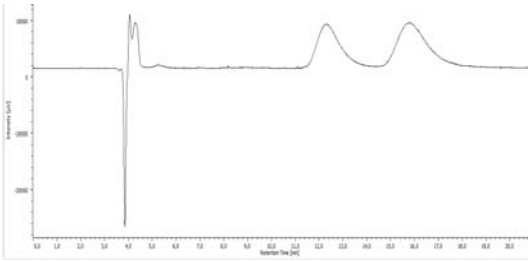
Analyte **26**
MeOH: NH_4OAc pH 4 (50:50 *v/v)*



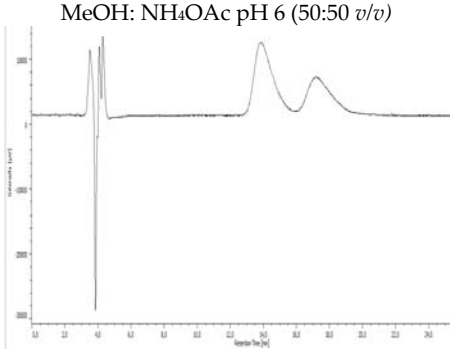
Analyte **27**
MeOH: NH_4OAc pH 6 (50:50 *v/v)*



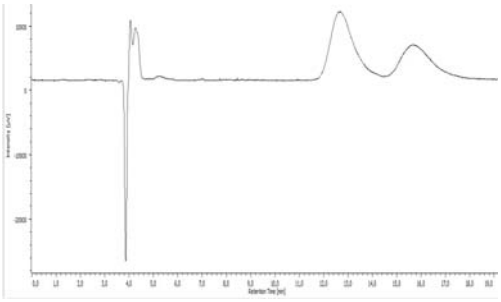
Analyte **27**
MeOH: NH_4OAc pH 4 (50:50 *v/v)*



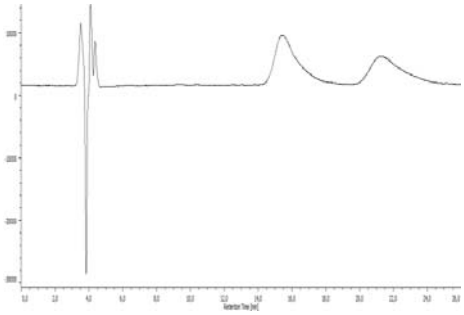
Analyte **28**
MeOH: NH_4OAc pH 6 (50:50 *v/v)*



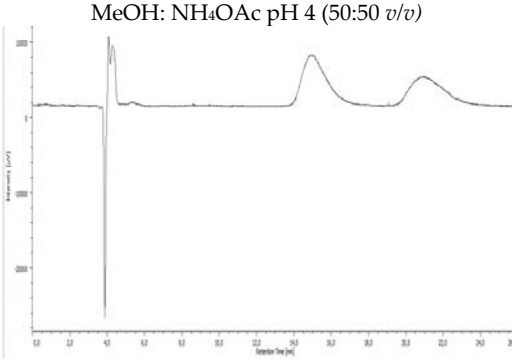
Analyte **28**
MeOH: NH_4OAc pH 4 (50:50 *v/v)*



Analyte **29**
MeOH: NH_4OAc pH 6 (50:50 *v/v)*

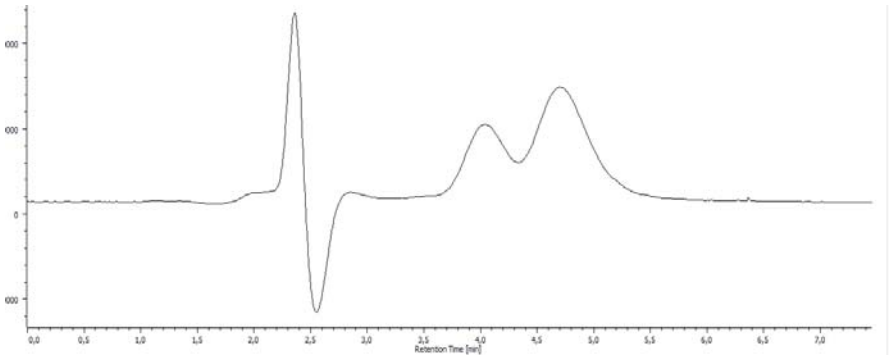


Analyte **29**
MeOH: NH_4OAc pH 4 (50:50 *v/v)*

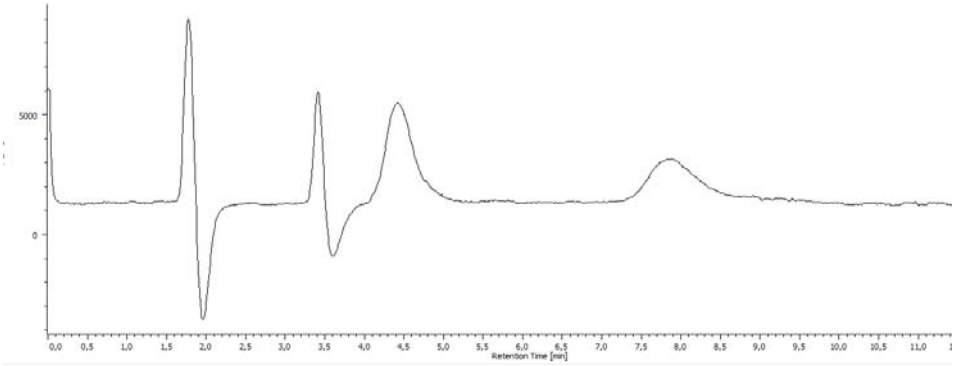


SFigure 13: Chromatograms for the enantioseparation of analytes **26-29** on Chirobiotic V column using different mobile phases. Chromatographic conditions: Flow rate: 0.5 mL/min, UV detection at 254 nm.

Analyte **2**
100 % EtOH



Analyte **17**
Hex:EtOH (70:30 *v*/*v*)



SFigure 14: Chromatograms for the enantioseparation of analytes **2** and **17** on Chirobiotic TAG column using different mobile phases. Chromatographic conditions: Flow rate: 0.2 mL/min, UV detection at 254 nm.