Supporting Information

Application of Lipophilic Prodrug Charge Masking strategy to obtain novel, potential oxytocin prodrugs

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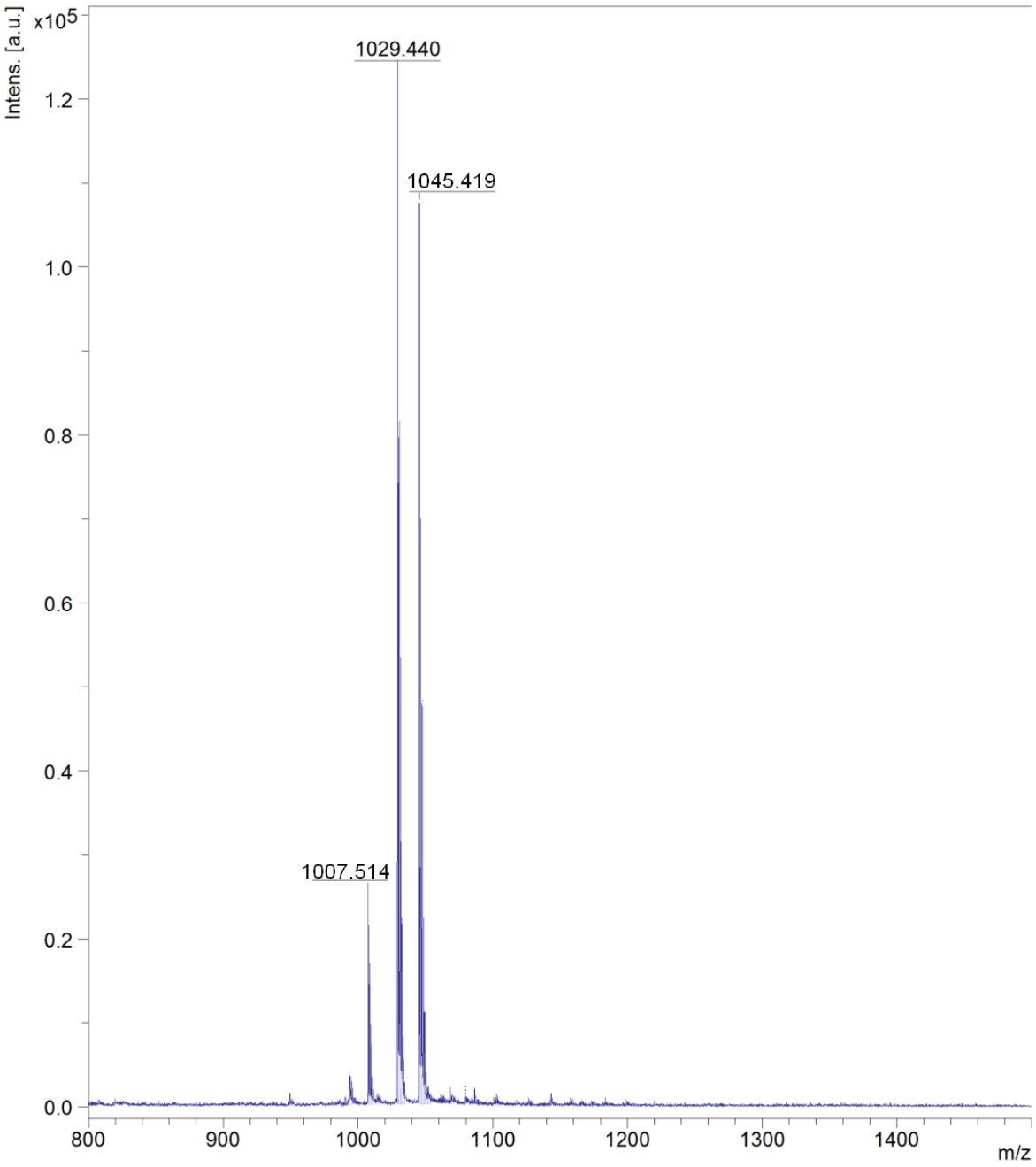


Figure S1. MS analysis of OT; Calculated mass 1006.44; Found mass $[M+H]^+$ 1007.514, $[M+Na]^+$ 1029.440, $[M+K]^+$ 1045.419

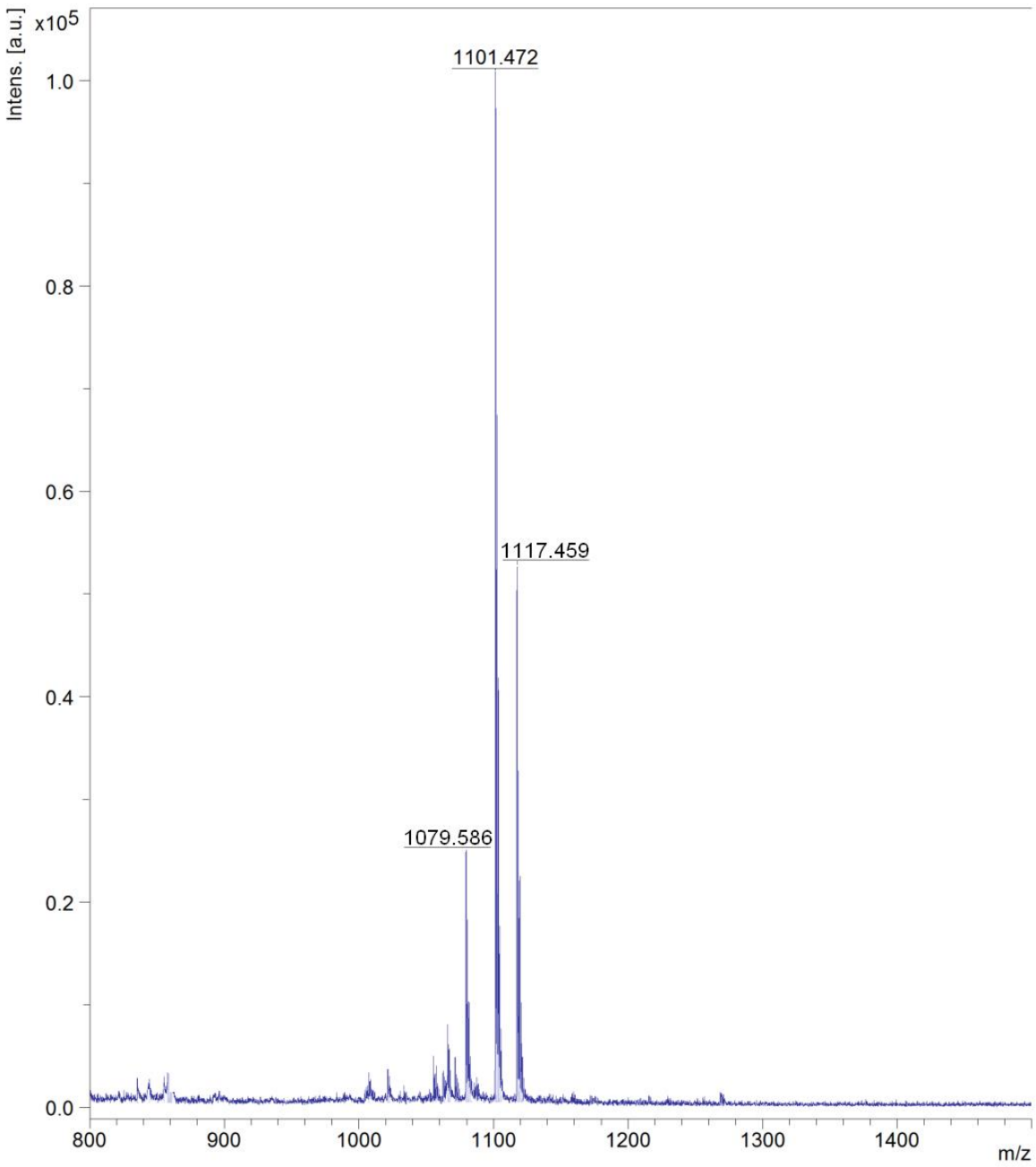


Figure S2. MS analysis of Et-OT; Calculated mass 1078.46; Found mass $[M+H]^+$ 1079.586 $[M+Na]^+$ 1101.472, $[M+K]^+$ 1117.459

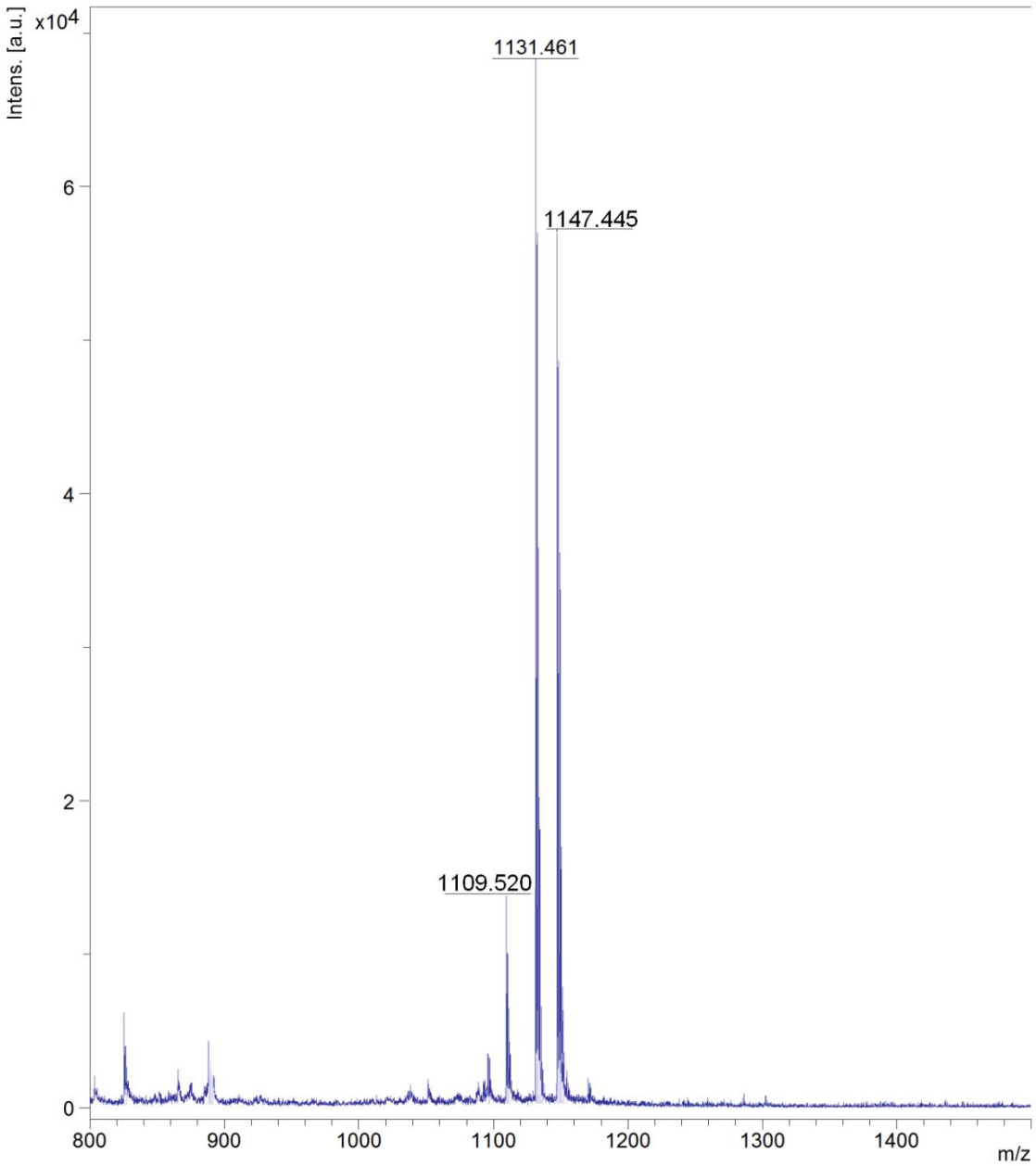


Figure S3. MS analysis of MeOEt-OT; Calculated mass 1108.47; Found mass $[M+H]^+$ 1109.520, $[M+Na]^+$ 1131.461, $[M+K]^+$ 1147.445

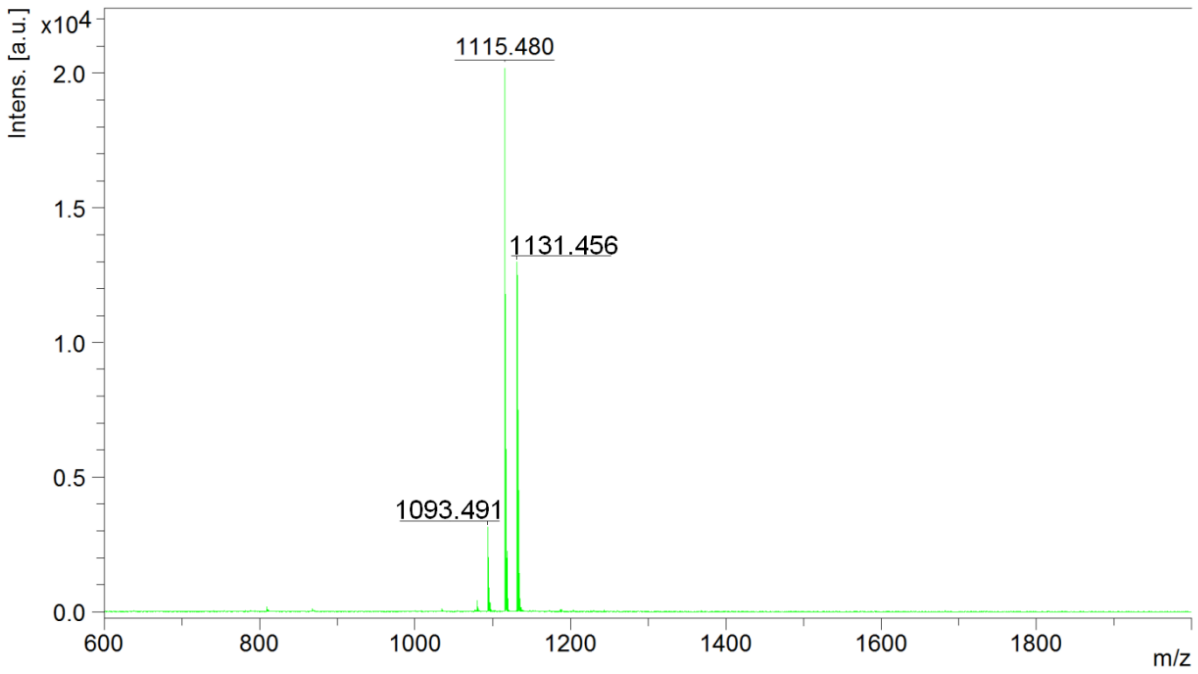


Figure S4. MS analysis of Prop-OT; Calculated mass 1092.47; Found mass $[M+H]^+$ 1093.491, $[M+Na]^+$ 1115.480, $[M+K]^+$ 1131.456

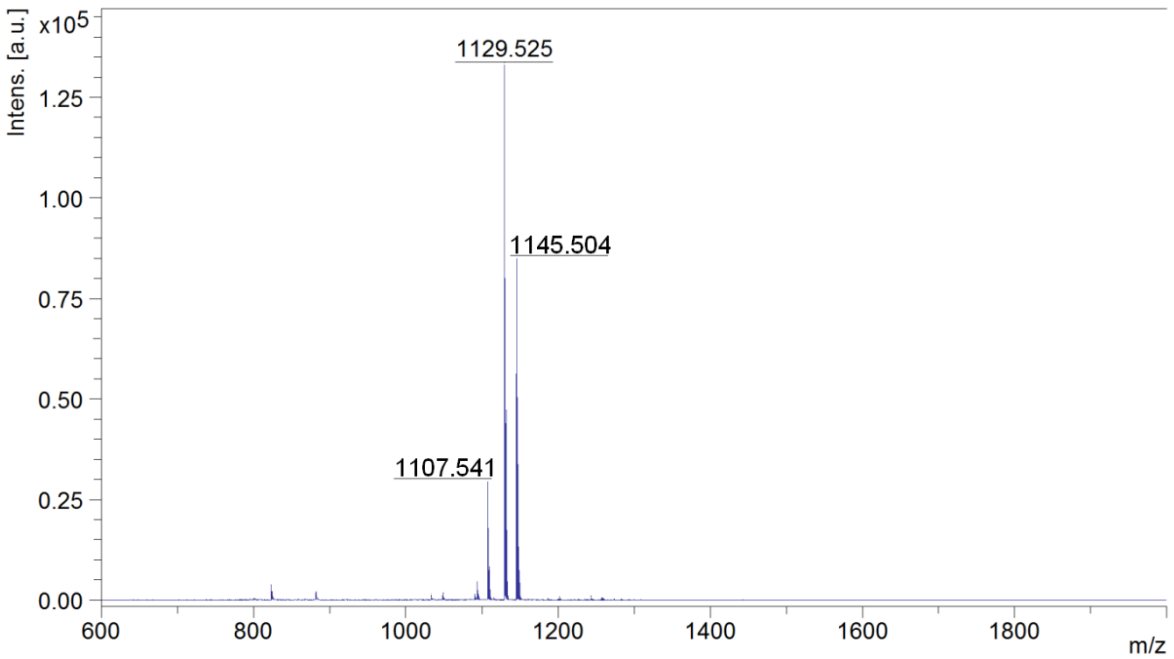


Figure S5. MS analysis of But-OT; Calculated mass 1106.49; Found mass $[M+H]^+$ 1107.541, $[M+Na]^+$ 1129.525, $[M+K]^+$ 1145.504

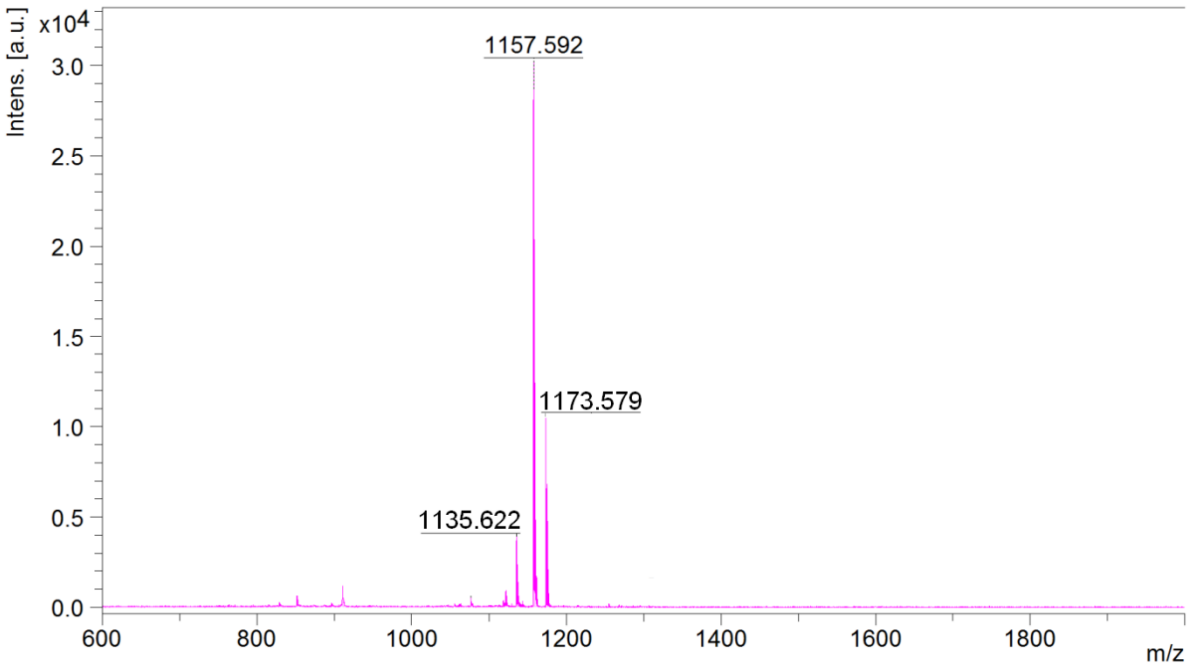


Figure S6. MS analysis of Hoc-OT; Calculated mass 1134.52; Found mass $[M+H]^+$ 1135.622, $[M+Na]^+$ 1157.582, $[M+K]^+$ 1173.579

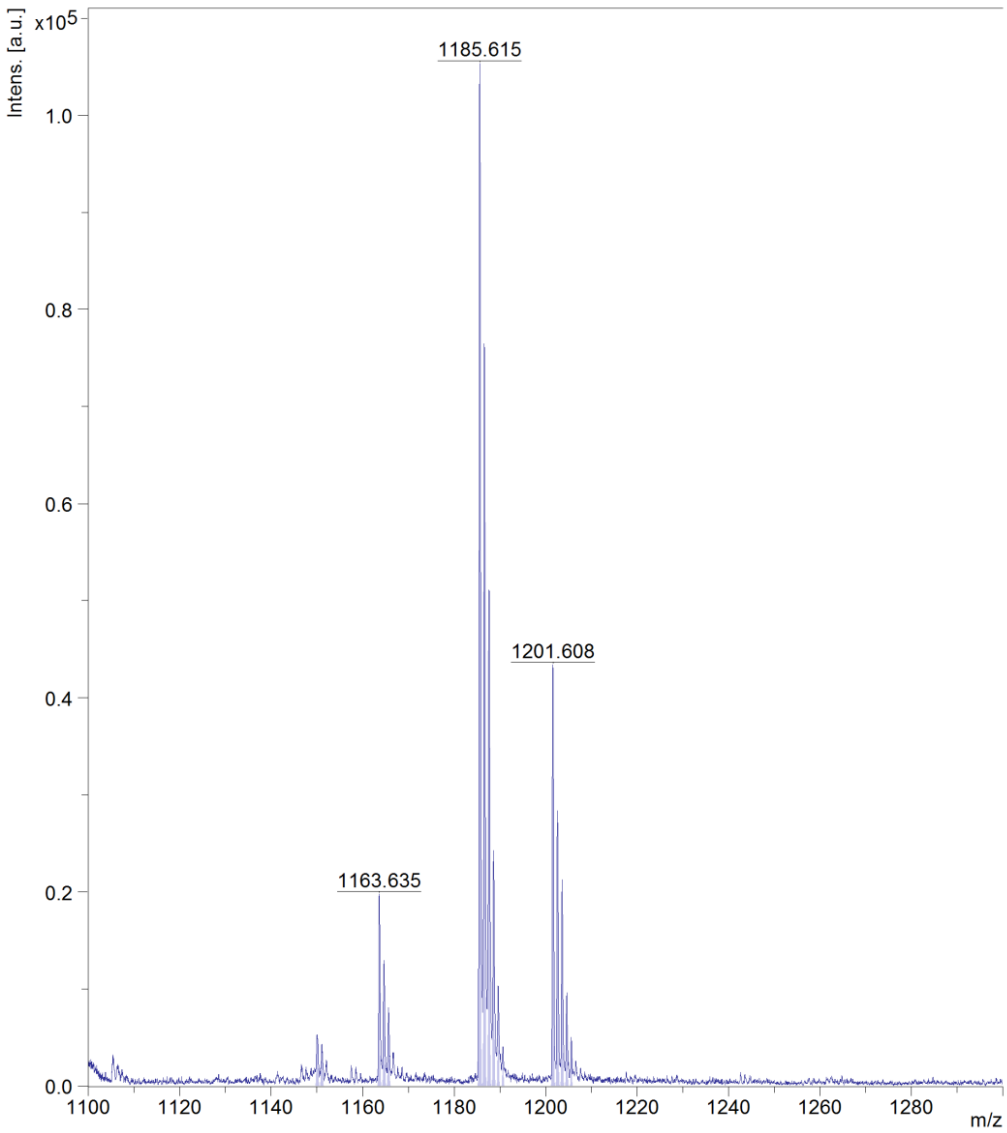


Figure S7. MS analysis of Oct-OT; Calculated mass 1162.55; Found mass $[M+H]^+$ 1163.635, $[M+Na]^+$ 1185.615, $[M+K]^+$ 1201.608

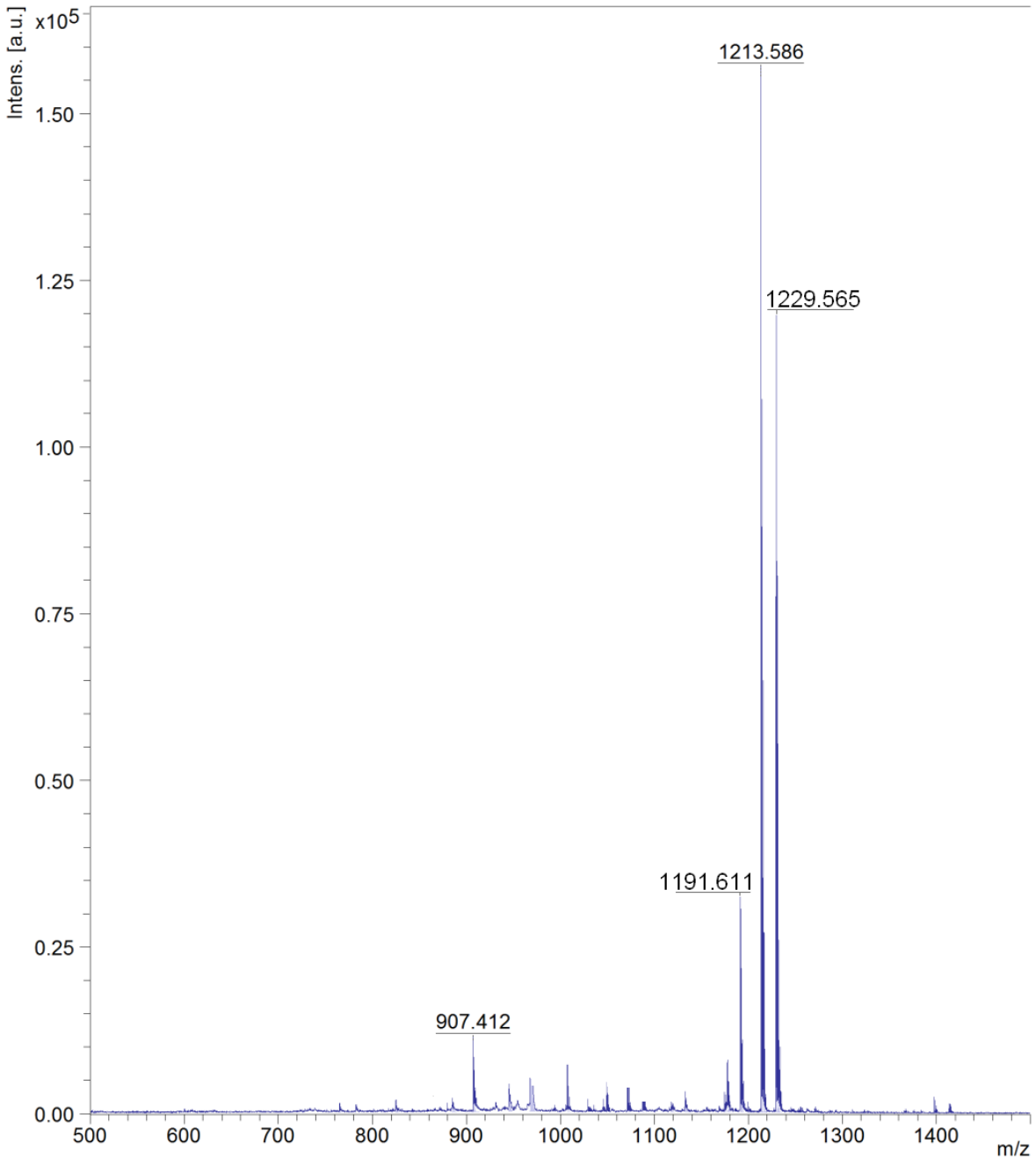


Figure S8. MS analysis of Dec-OT; Calculated mass 1190.58; Found mass $[M+H]^+$ 1191.611, $[M+Na]^+$ 1213.586, $[M+K]^+$ 1229.565

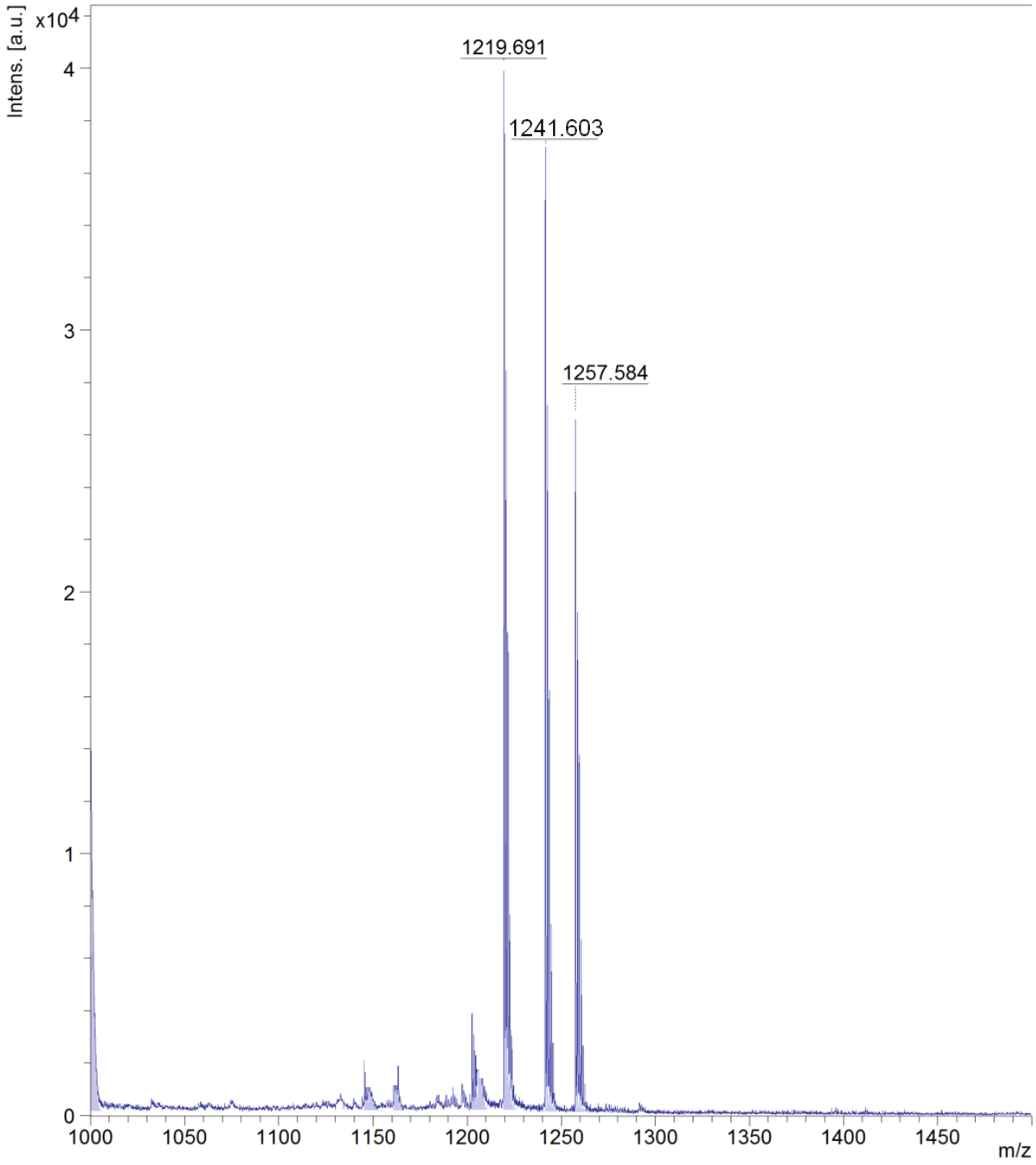


Figure S9. MS analysis of Dod-OT; Calculated mass 1218.61; Found mass $[M+H]^+$ 1219.691, $[M+Na]^+$ 1241.603, $[M+K]^+$ 1257.584

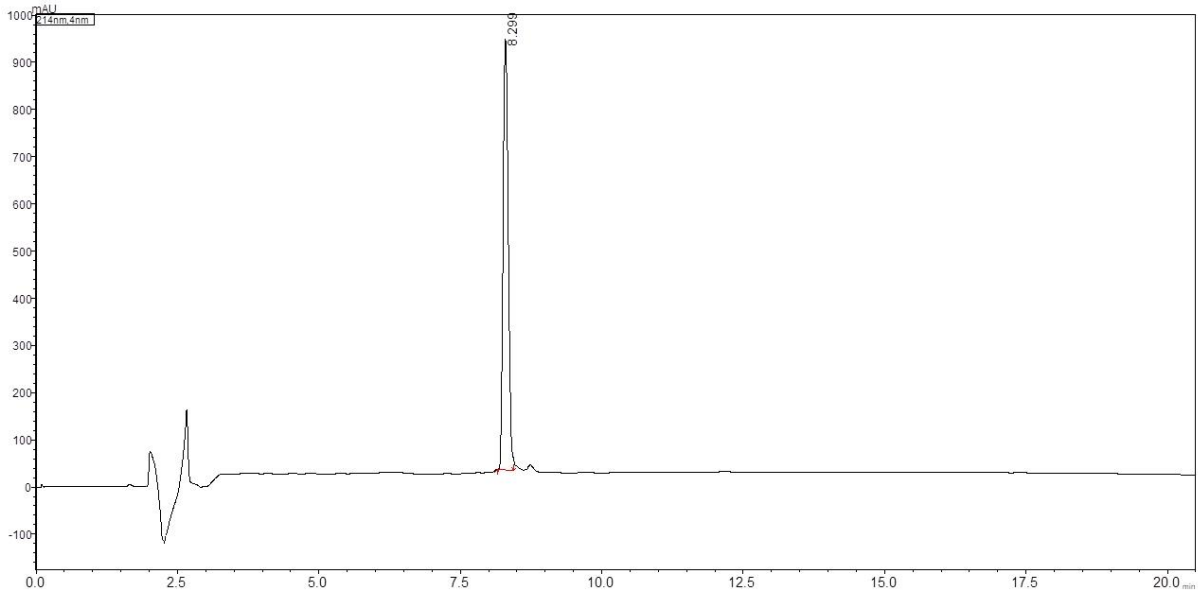


Figure S10. HPLC analysis of OT.

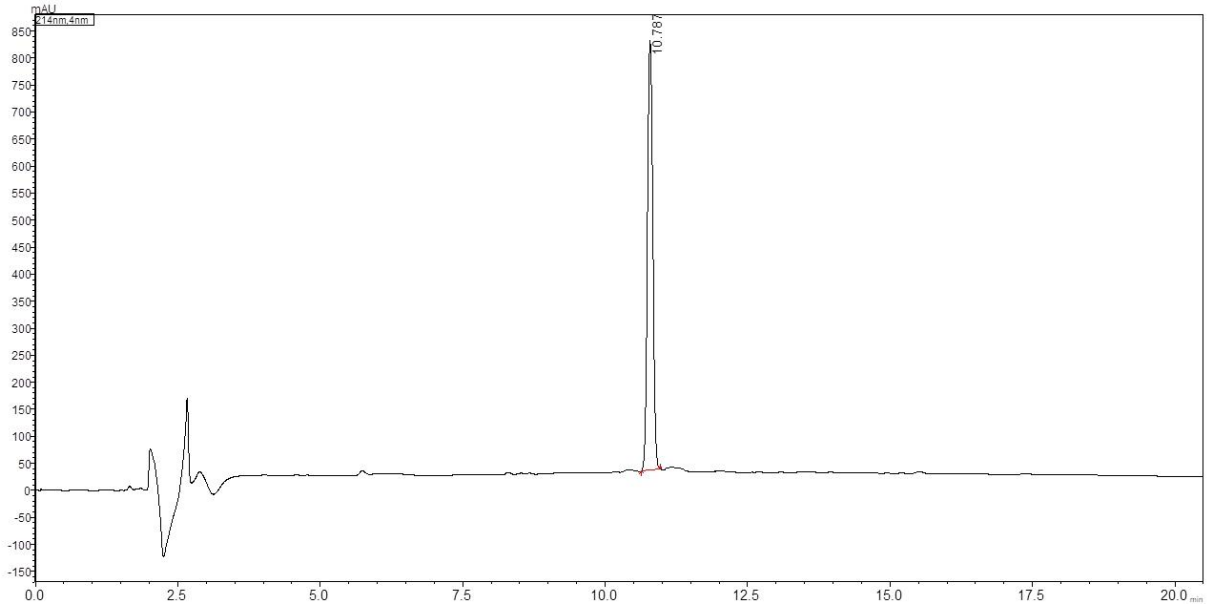


Figure S11. HPLC analysis of Et-OT.

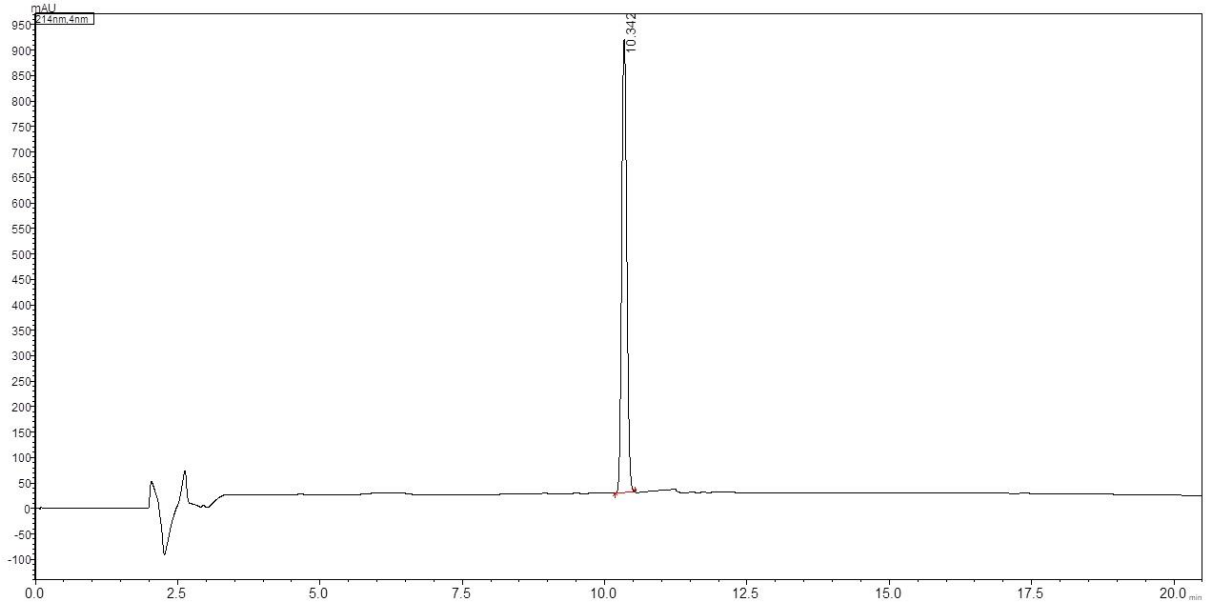


Figure S12. HPLC analysis of MeOEt- OT.

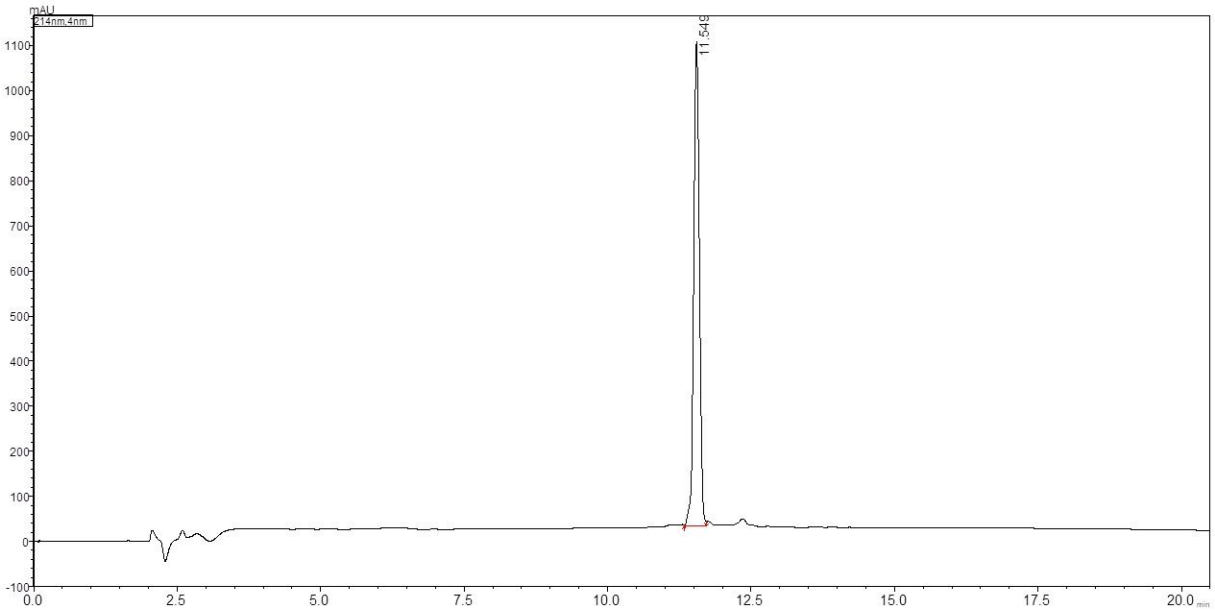


Figure S13. HPLC analysis of Prop-OT.

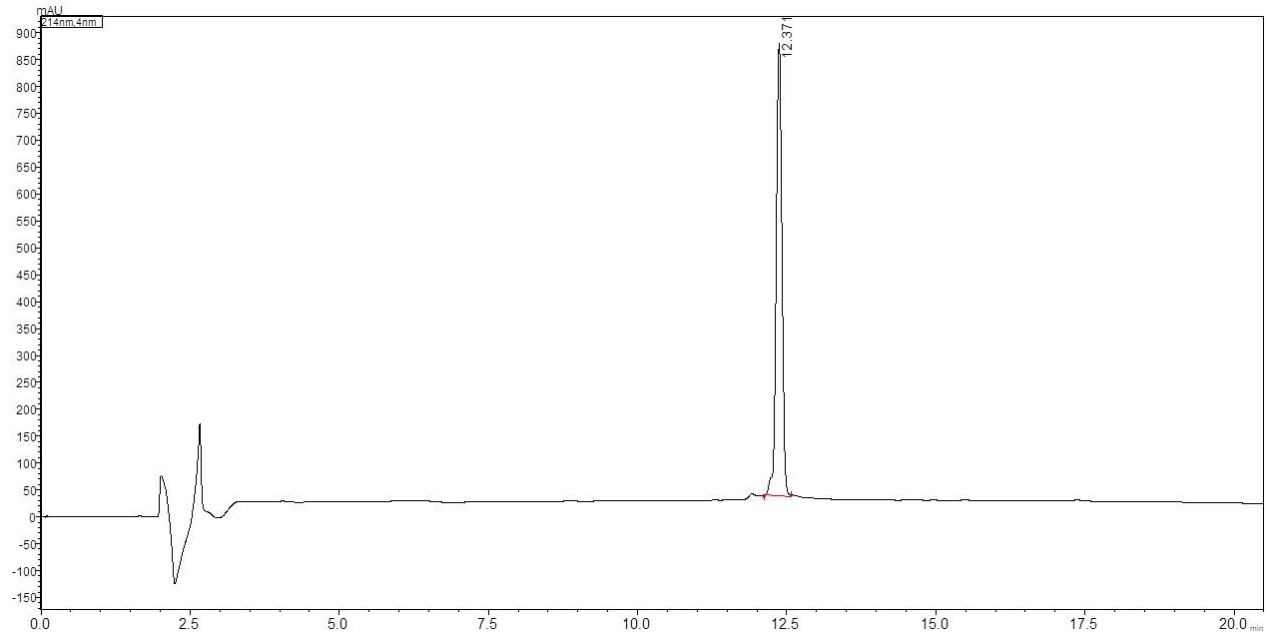


Figure S14. HPLC analysis of But-OT.

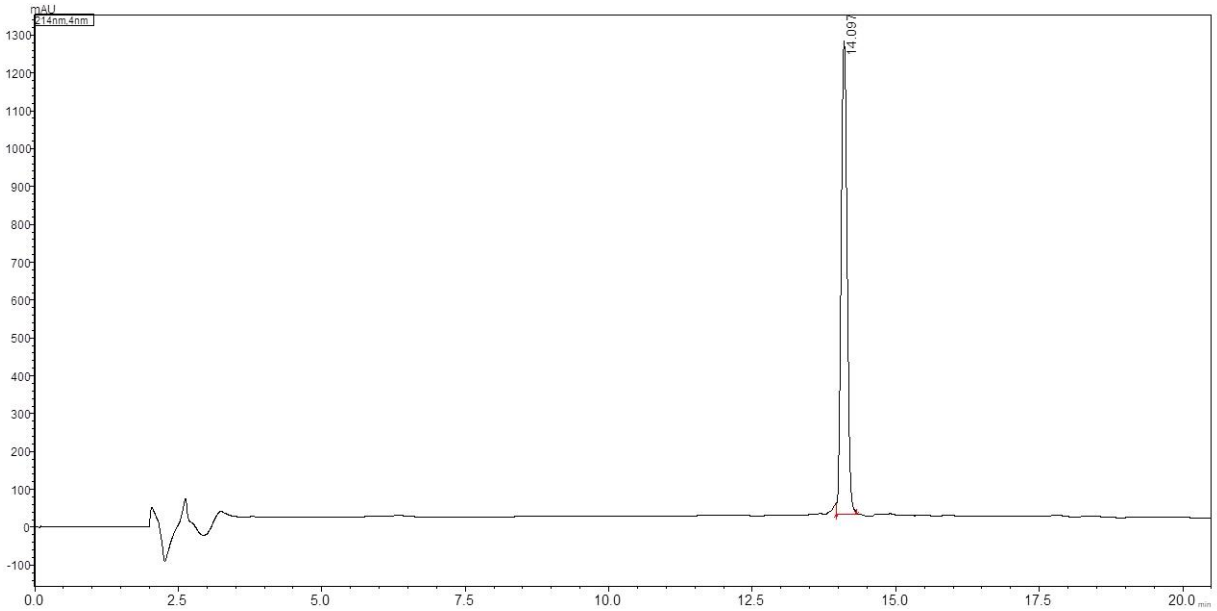


Figure S15. HPLC analysis of Hoc-OT.

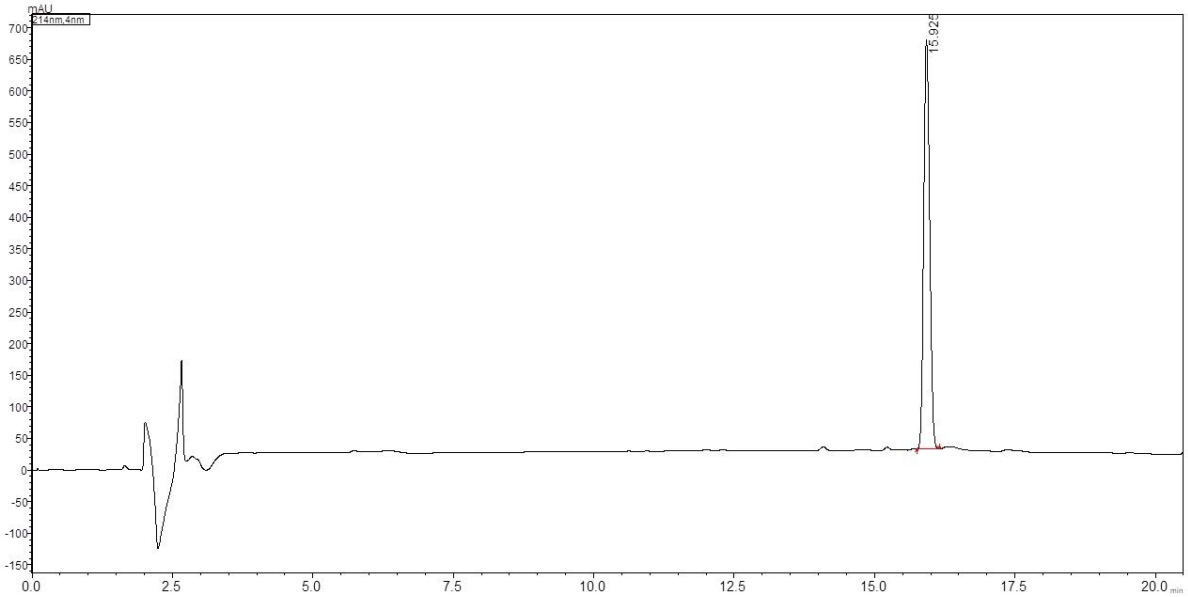


Figure S16. HPLC analysis of Oct-OT

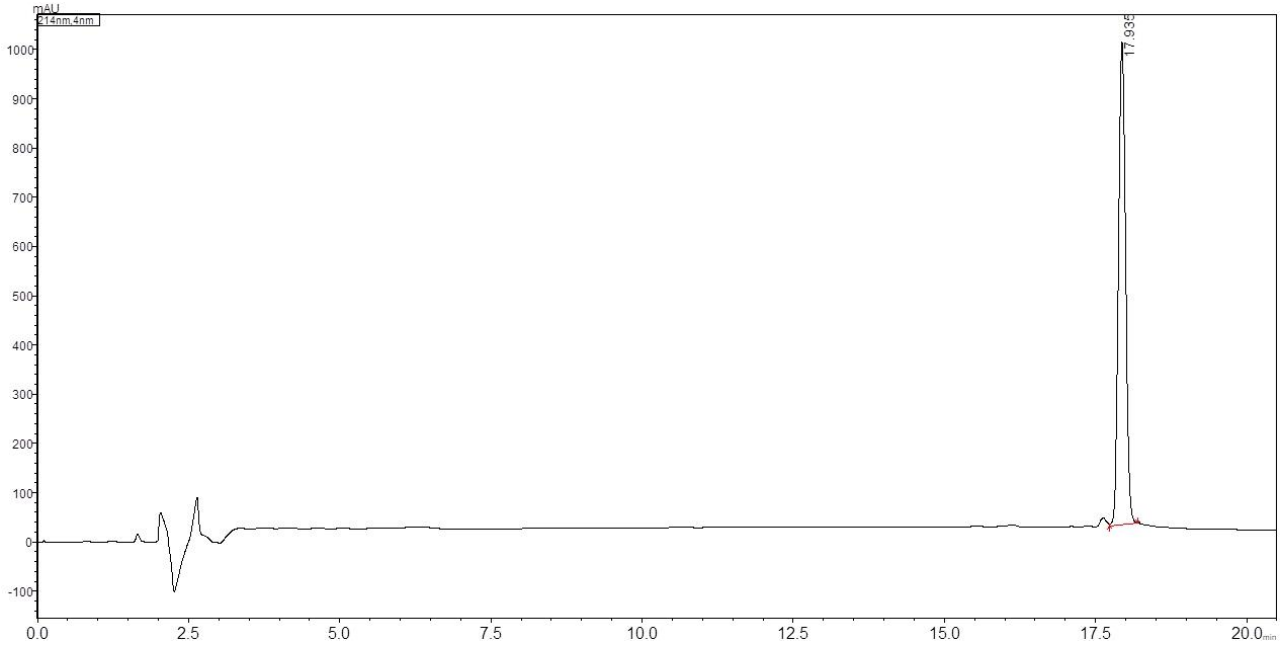


Figure S17. HPLC analysis of Dec-OT

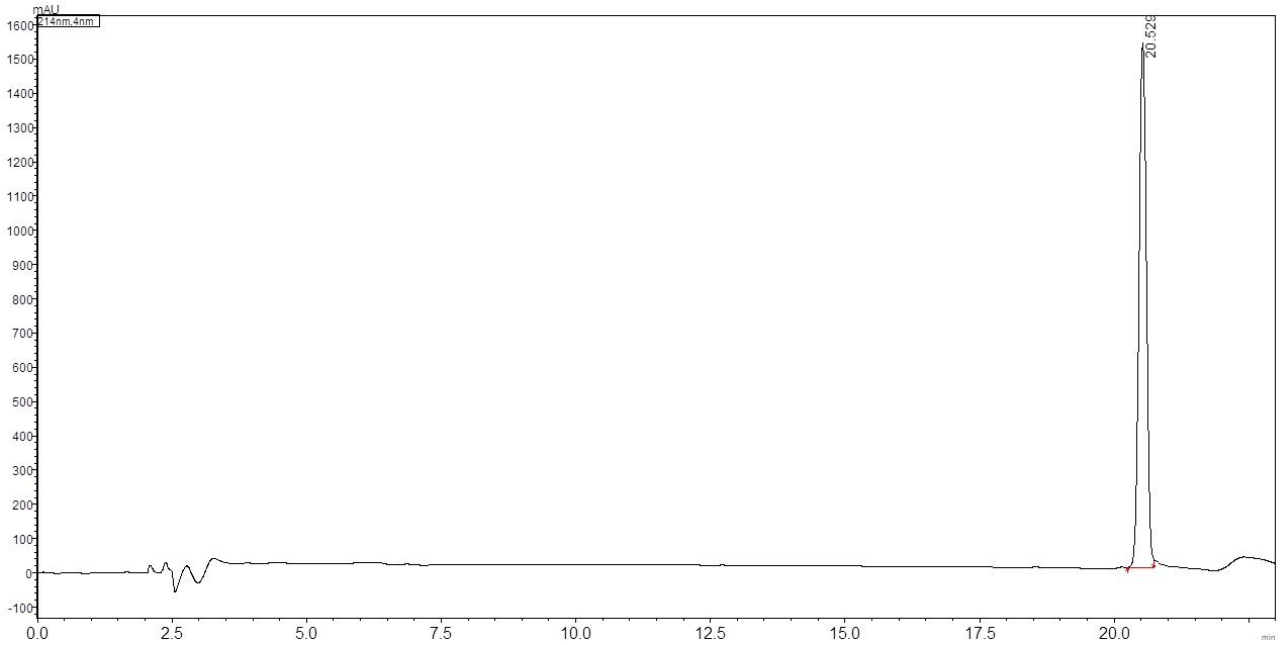


Figure S18. HPLC analysis of Dod-OT. This compound was analyzed in standard method (10-90%B in 20 min), however the time of chromatogram view was extended to 23 min.

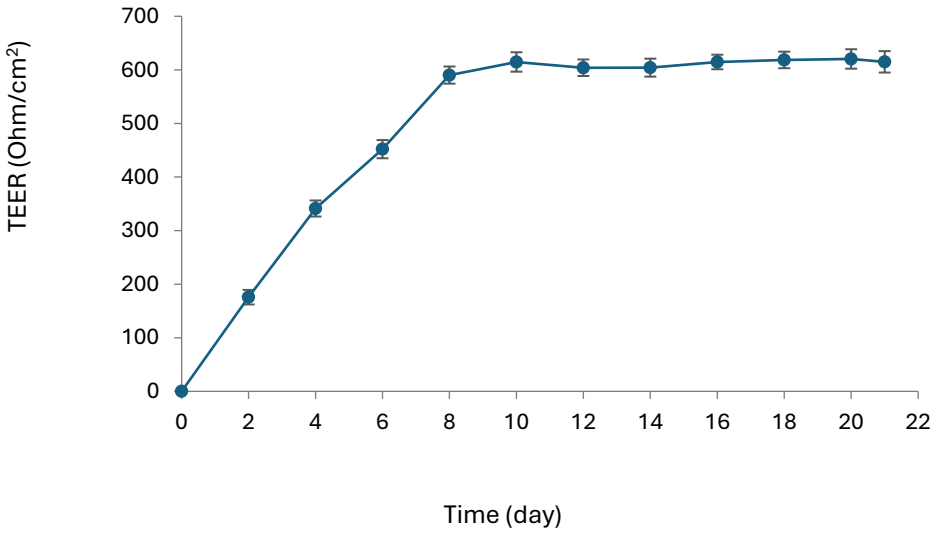


Figure S19. Transepithelial electrical resistance (TEER) during long-term Caco-2 cell culture to form integrated intestinal epithelium. Data present mean TEER values (±SD) obtained from 10 Caco-2 cell cultures.