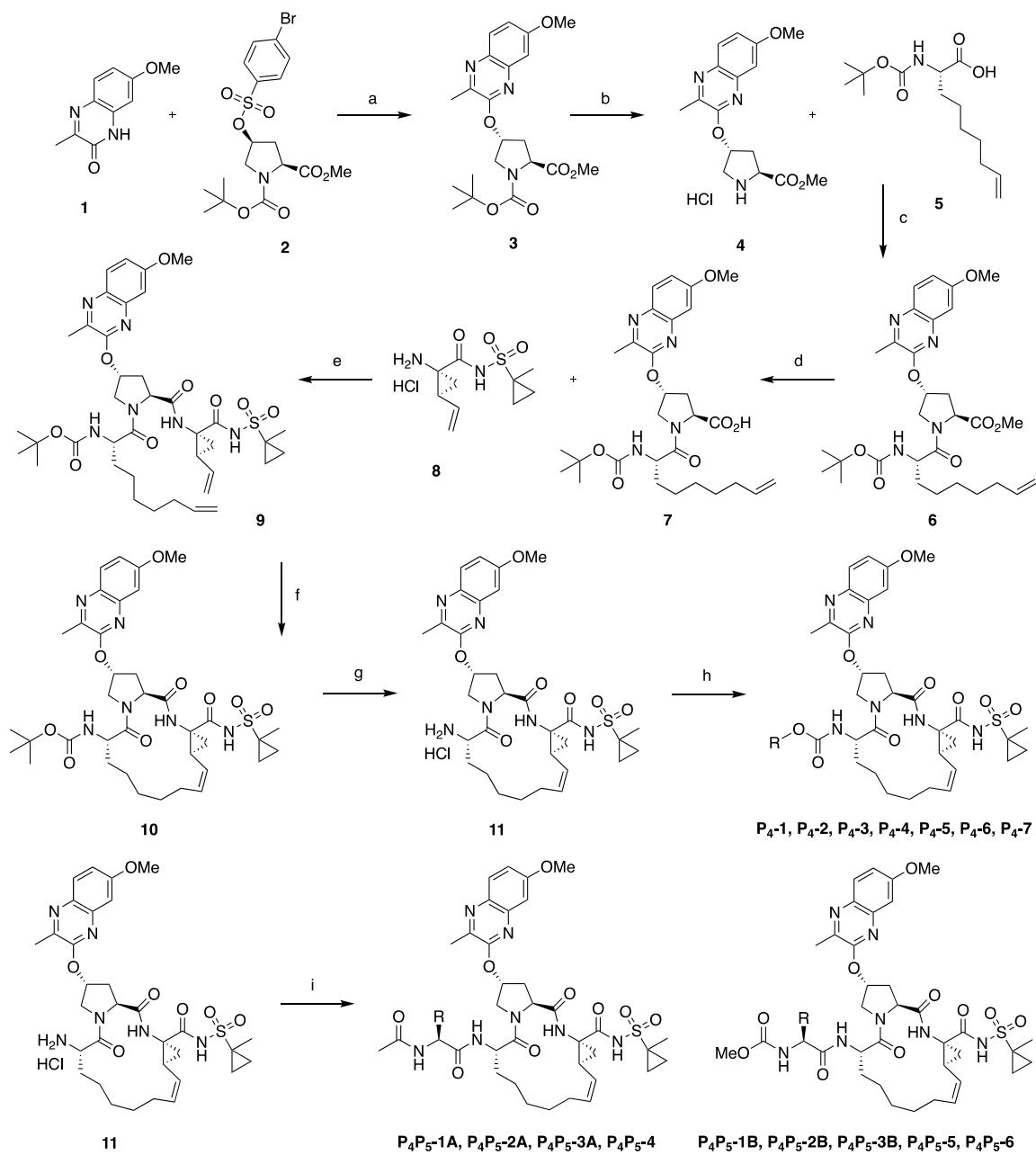


Scheme S1. Synthesis of HCV NS3/4A protease inhibitors



Reagents and Conditions: (a) Cs₂CO₃, NMP, 55 °C, 6 h; (b) 4 N HCl in dioxane, CH₂Cl₂, RT, 3 h; (c) HATU, DIEA, DMF, RT, 4 h; (d) LiOH·H₂O, THF, H₂O, RT, 24 h; (e) HATU, DIEA, DMF, RT, 2 h; (f) Zhan 1b catalyst, 1,2-DCE, 70 °C, 6 h; (g) 4 N HCl in dioxane, RT, 3 h; (h) alcohol-(4-nitrophenyl) carbonate, DIEA, CH₃CN, RT, 36 h; (i) *N*-protected amino acid, HATU, DIEA, DMF, RT, 4 h.