

Figure 1.

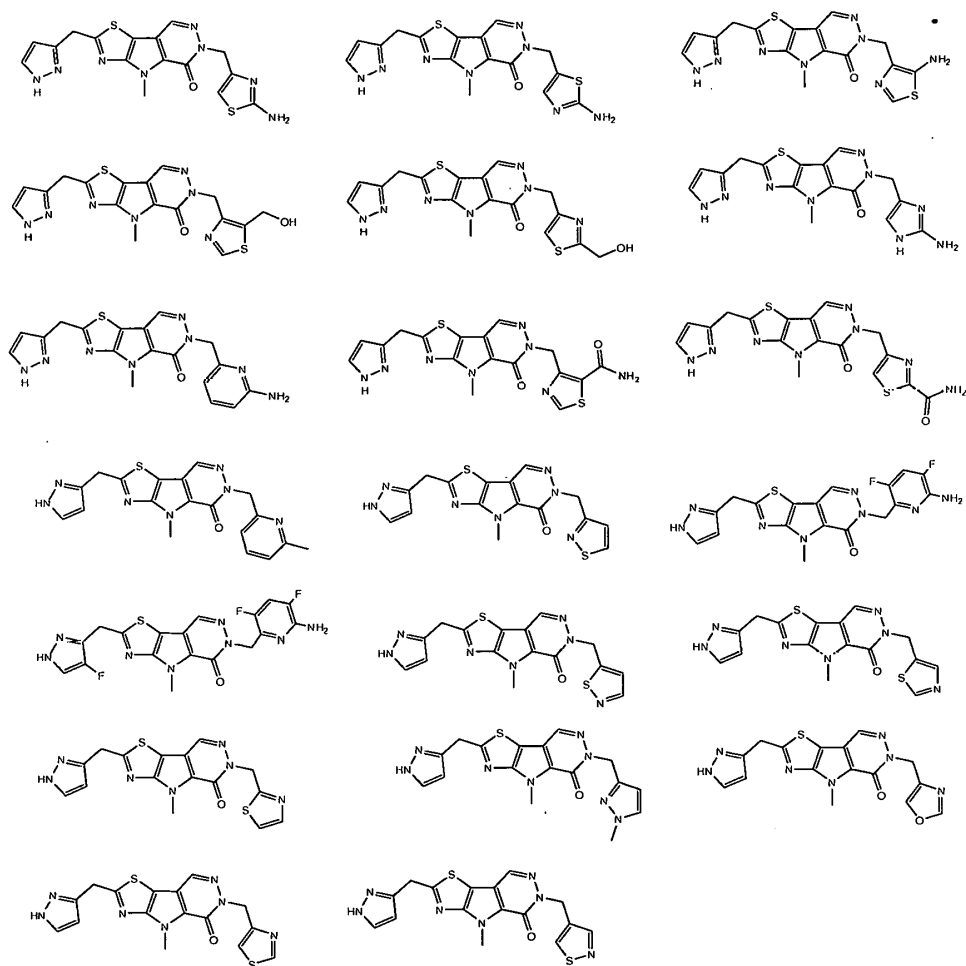


Figure 2. Table of intermediates used in Examples 1-10

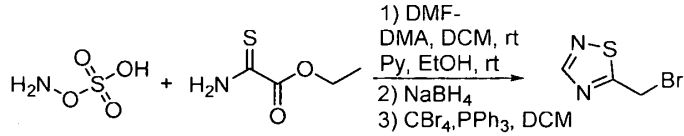
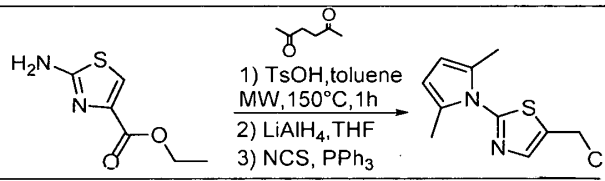
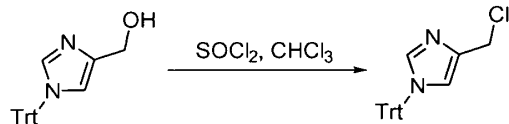
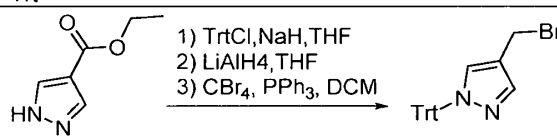
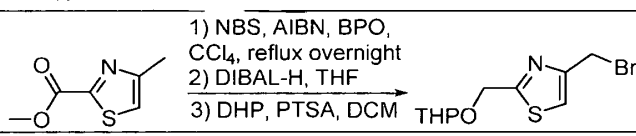
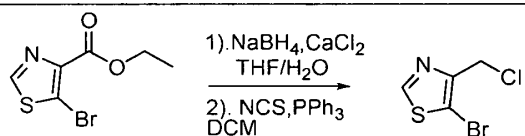
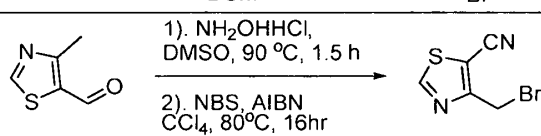
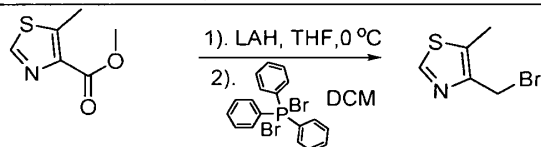
Cpds in Examples	Synthesis of the intermediates
E7-7	
E7-8	
E7-9	
E7-10	
E7-12	
E7-15	
E7-17	
E7-19	
E7-21	

Figure 2 - Continued

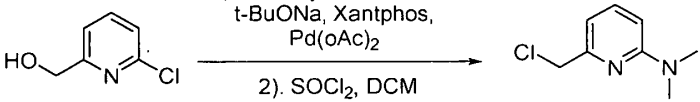
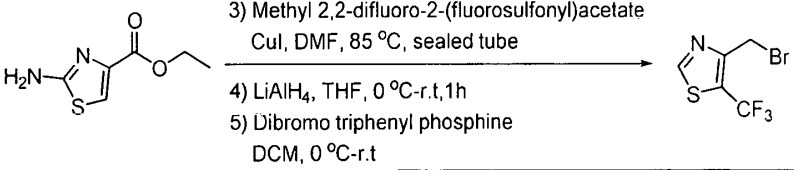
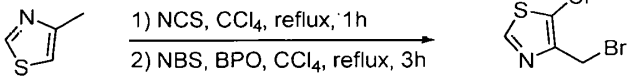
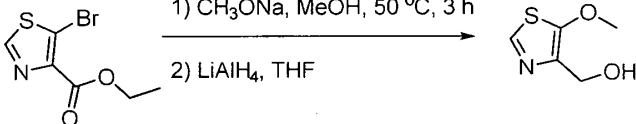
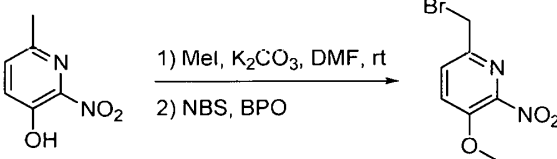
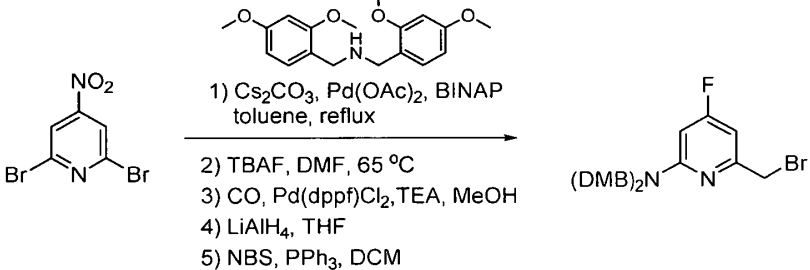
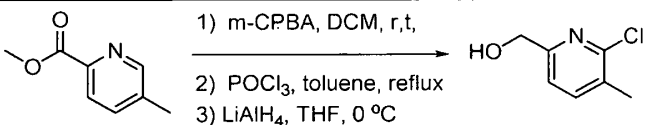
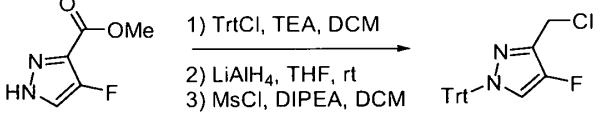
E7-22	 1). dimethylamine in THF t-BuONa, Xantphos, Pd(oAc)₂ 2). SOCl₂, DCM
E7-23	 1) NIS, DCM r.t, 24 h 2) <i>t</i>-BuNO₂, THF, 50 °C-r.t, 2h 3) Methyl 2,2-difluoro-2-(fluorosulfonyl)acetate CuI, DMF, 85 °C, sealed tube 4) LiAlH₄, THF, 0 °C-r.t, 1h 5) Dibromo triphenyl phosphine DCM, 0 °C-r.t
E7-24	 1) NCS, CCl₄, reflux, 1h 2) NBS, BPO, CCl₄, reflux, 3h
E7-25	 1) CH₃ONa, MeOH, 50 °C, 3 h 2) LiAlH₄, THF
E7-27	 1) MeI, K₂CO₃, DMF, rt 2) NBS, BPO
E7-28	 1) Cs₂CO₃, Pd(OAc)₂, BINAP toluene, reflux 2) TBAF, DMF, 65 °C 3) CO, Pd(dppf)Cl₂, TEA, MeOH 4) LiAlH₄, THF 5) NBS, PPh₃, DCM
E7-29	 1) m-CPBA, DCM, r.t, 2) POCl₃, toluene, reflux 3) LiAlH₄, THF, 0 °C
E7-30	 1) TrtCl, TEA, DCM 2) LiAlH₄, THF, rt 3) MsCl, DIPEA, DCM

Figure 2 - Continued

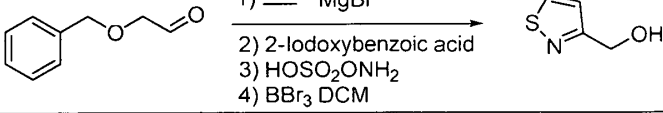
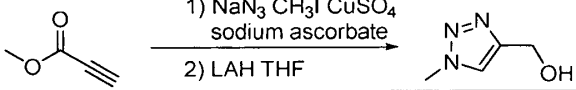
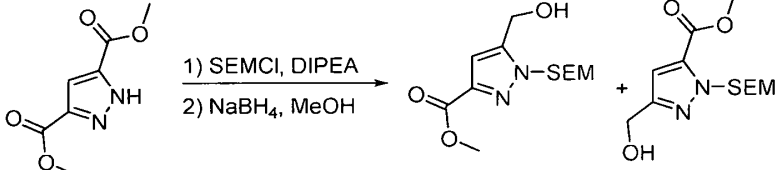
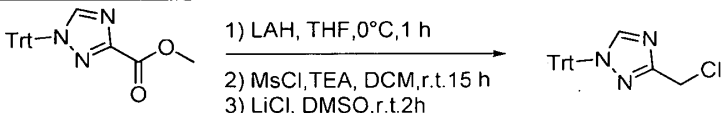
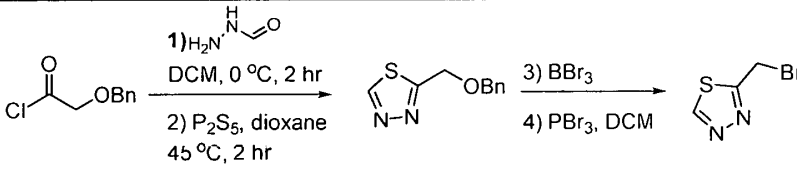
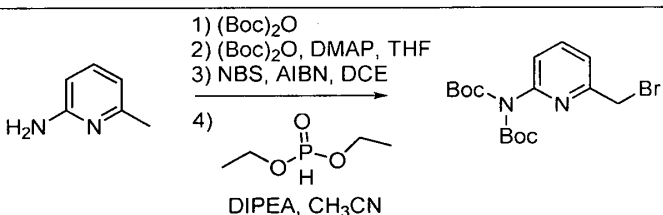
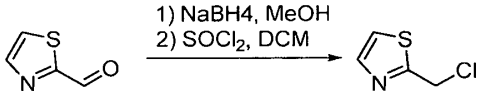
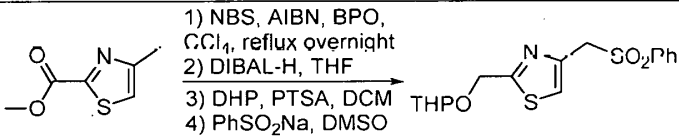
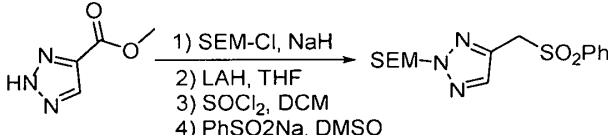
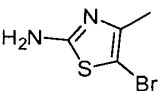
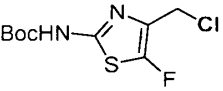
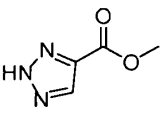
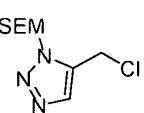
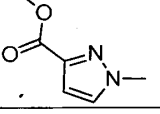
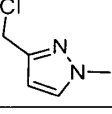
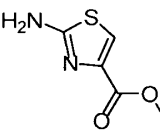
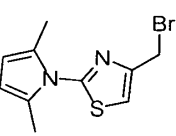
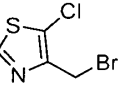
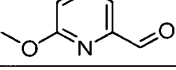
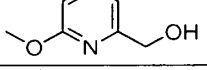
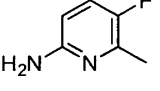
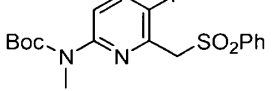
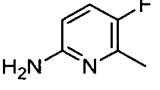
E7-41	 1) $\text{CH}_3\text{CH}_2\text{C}\equiv\text{CH-MgBr}$ 2) 2-Iodoxybenzoic acid 3) $\text{HOSO}_2\text{ONH}_2$ 4) BBr_3 DCM
E7-43	 1) NaN_3, CH_3I, CuSO_4, sodium ascorbate 2) LAH THF
E7-46	 1) SEM-Cl, DIPEA 2) NaBH_4, MeOH
E7-55	 1) LAH, THF, 0°C, 1 h 2) MsCl, TEA, DCM, r.t. 15 h 3) LiCl, DMSO, r.t. 2 h
E7-56	 1) $\text{H}_2\text{N}-\text{CHO}$, DCM, 0°C, 2 hr 2) P_2S_5, dioxane, 45°C, 2 hr 3) BBr_3 4) PBr_3, DCM
E8-4	 1) $(\text{Boc})_2\text{O}$ 2) $(\text{Boc})_2\text{O}$, DMAP, THF 3) NBS, AIBN, DCE 4) $\text{EtO}-\text{P}(=\text{O})(\text{OEt})_2$, DIPEA, CH_3CN
E8-11	 1) NaBH_4, MeOH 2) SOCl_2, DCM
E8-18	 1) NBS, AIBN, BPO, CCl_4, reflux overnight 2) DIBAL-H, THF 3) DHP, PTSA, DCM 4) PhSO_2Na, DMSO
E8-23	 1) SEM-Cl, NaH 2) LAH, THF 3) SOCl_2, DCM 4) PhSO_2Na, DMSO

Figure 2 - Continued

E8-27, E8-28, E8-37, E8-38		1). (Boc) ₂ ODCM, TEA, DMAP, r.t 2). N-fluorobenzenesulfonimide n-BuLi, THF 3). NCS, BPO, 80 °C, 2 h	
E8-27, E8-28, E8-32, E8-40		1) SEM-Cl, NaH, THF, 0°C, 2hr 2) LAH, THF, 0°C, 1hr 3) SOCl ₂ , DCM, 0°C, 1hr	
E8-30		1) LAH, THF 2) SOCl ₂ , DCM, rt, 1 hr	
E8-31		 1) TsOH, toluene MW, 150°C, 1h 2) LiAlH ₄ , THF 3) Dibromo triphenyl phosphine THF, rt, 1h	
E8-32 E8-33		1) NCS, CCl ₄ , reflux, 1h 2) NBS, BPO, CCl ₄ , reflux, 3h	
E8-36		NaBH ₄ , MeOH, r.t	
E8-52		1) (Boc) ₂ O, 60 °C 2) MeI, NaH, DMF 3) NBS, AIBN, CCl ₄ 4) DMSO, PhSO ₂ Na	
E8-53		1) (Boc) ₂ O 2) NBS, AIBN	