20	To a solution of amine in acetic acid, dry sodium acetate is added, followed by addition of sulfonyl chloride. The vial is then sealed and placed in ultrasound bath for 24 hours; the temperature in the bath is controlled to be below 60°C.
34	To a solution of amine/alcohol/thiol in 5 % DMSO solution of sodium iodide, alkyl chloride and a 4M solution of KOH in methanol are added. The vial is then sealed and heated at 100°C for 5 hours.
38	To a solution of amine in 5 % DMSO solution of sodium iodide, alkyl chloride and DIPEA are added. The vial is then sealed and heated at 100°C for 10 hours.
43	To a solution of the thiourea in acetonitrile, halogenketone is added. The vial is then sealed and heated at 100°C for 2.5 hours.
207	Step1: To a solution of amine in DMF, aldehyde is added, followed by 4M solution of KOH in methanol. The vial is then sealed and heated at 100°C for 5 hours.
	Step2: To the cooled to rt reaction mixture, sodium borohydride and methanol are added, and the vial is placed into the ultrasound bath for 2 hours; the temperature is controlled to be rt. Then the vial is then left for 12 hours. Then the vial is placed in ultrasound bath again, with no temperature control, for 3 hours.
512	To a solution of CDI in DMSO, amine 1 is added; the mixture is stirred until full dissolution. Then, after addition of 0.06ml of water, the mixture is left stirred for additional 0.5 hour, followed by addition of amine 2. The vial is then sealed and heated at 100°C for 4 hours.
527	Solution of acid and CDI in DMSO is heated in sealed vial at 60°C for 2 hours. After cooling to rt, the amine is added. Then the vial is sealed and heated at 100°C for 10 hours.
2714	Step1: To a solution of alkyl chloride and thiol in 1ml isopropanol, a 4M solution of KOH in methanol is added. The vial is then sealed and placed to ultrasound bath for 2 hours; the temperature is controlled to be below 60°C. Step2: To the reaction mixture, 1ml of methanol and 0.175ml of acetic acid are added, followed by 0.45ml 50% aqueous H2O2 and 0.175ml 10% aqueous solution of ammonium molibdate. The vial is then placed into ultrasound bath for 5 hours; the temperature of the bath is controlled to be below 70°C.
2718	To a solution of amine 1 in acetonitrile ethyl chloroxo acetate is added dropwise. After
	stirring the reaction mixture for 0.5 hour, amine 2 is added. The vial is then sealed and heated at 100°C for 16 hours.
270942	Step1: Isothiocyanate and amine 1 are dissolved in acetonitrile. The vial is sealed and heated at 100°C for 9 hours and cooled to rt.

	Step2: To the reaction mixture, amine 2 and 1,3-propanesultone are added. The vial is then sealed and heated at 100°C for 16 hours. After cooling to rt, TEA is added to the reaction mixture, and heated at 100°C for 0.5 hour. Then the reaction mixture is cooled to rt and volatile components are evaporated under reduced pressure (2 hours, 60°C bath). The residue is dissolved in DMSO. Step3: After addition of hydrazide to the reaction mixture, the vial is sealed and heated at 100°C for 16 hours.
271570	Boronic component is dissolved in water-dioxane mixture (1:3). To the solution, aryl bromide, sodium carbonate and catalyst (1,1'-Bis(diphenylphosphino)ferrocene]dichloropalladium(II), complex with dichloromethane) are added. Air in the vial is substituted with argon, the vial is then sealed and heated at 95°C for 18 hours.
272104	Step1: Amine, DIPEA and bis(2,2,2-trifluoroethyl) carbonate are dissolved in acetonitrile. The vial is sealed and heated at 100°C for 2 hours. Then xylene is added and volatile components are evaporated under reduced pressure. DMSO is added as a solvent for the next step. Step2: After full dissolution of components, amino acid ester and DBU are added to the reaction mixture. The vial is sealed and heated at 100°C for 16 hours.
274090	Step1: Sodium azide is added to a solution of alkyl chloride in ethanol. The vial is sealed, stirred at rt for 24 hours and heated at 60°C for 6 hours. Before next step, reaction mixture is cooled to rt. Step2: To the reaction mixture, alkyne is added. The mixture is then stirred at rt for 4 hours. Then, aqueous solution of ascorbic acid and sodium carbonate and aqueous solution of copper acetate are added to the reaction mixture. The vial is sealed and heated at 60°C for 6 hours.