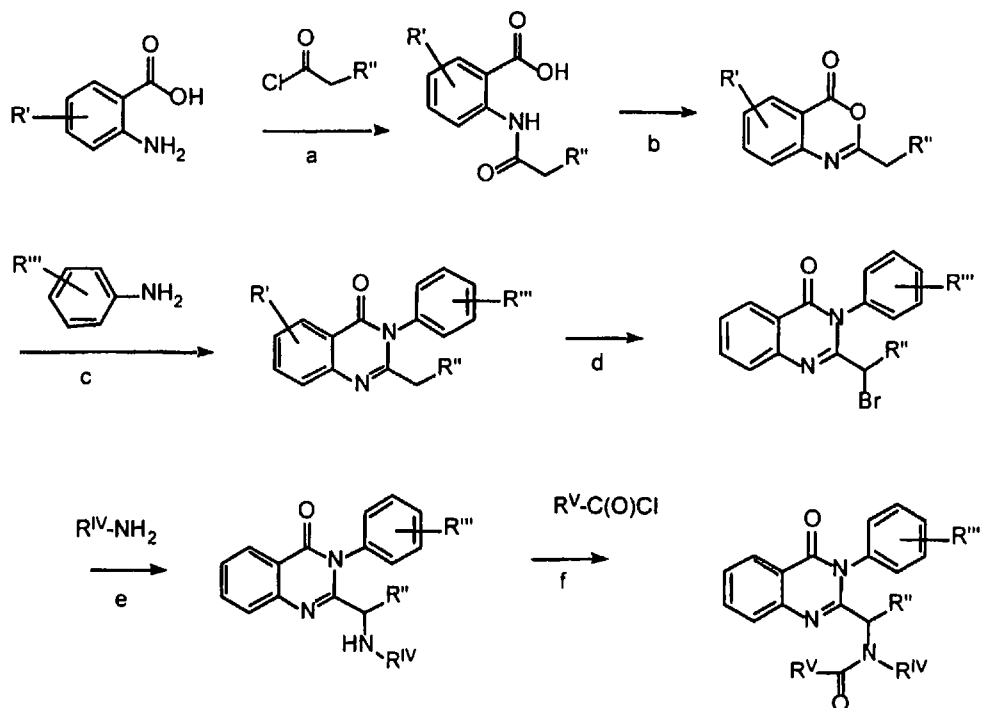


FIG. 1

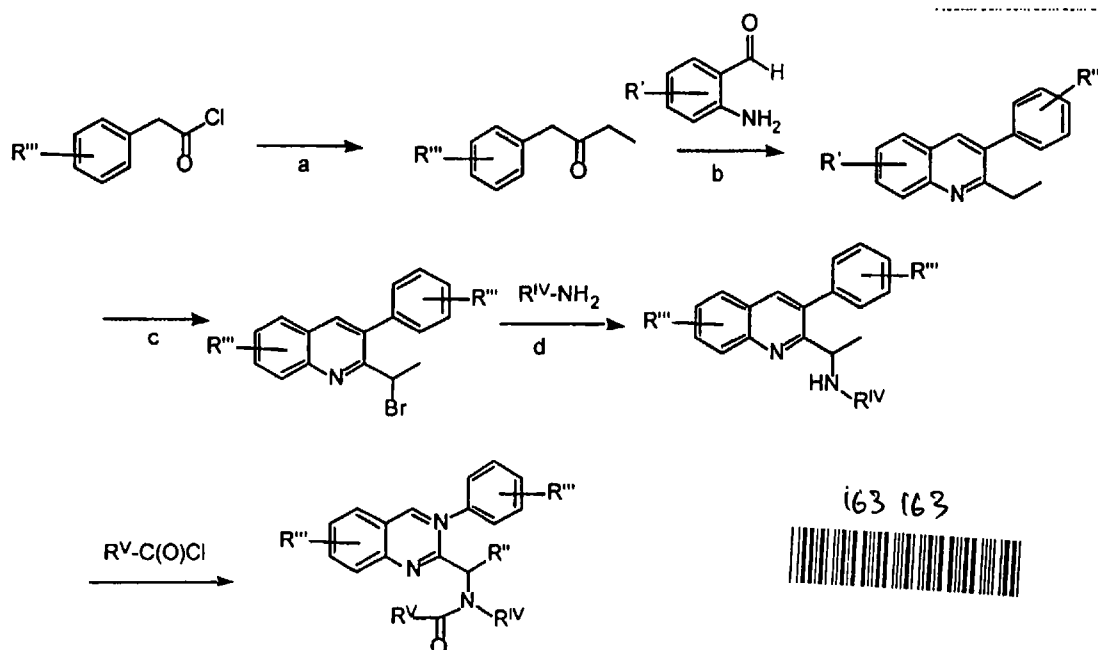


(a) DMF, RT (b) AcO_2 , 118-130°C (c) i. $CHCl_3$, 80°C; ii. cat. NaOH, ethylene glycol, 130°C
 (d) Br_2 , NaOAc, HOAc, 40°C (e) EtOH, 80°C (f) NEt_3 , cat. DMAP, 1,4-dioxane

FIG. 2



G00002



a Et_2Zn , $AlCl_3$, CH_2Cl_2 , -30°C- rt. b R' -substituted o-aminobenzaldehyde, 33% KOH, EtOH. c Br_2 , NaOAc, HOAc. d EtOH, 80°C.

FIG. 3

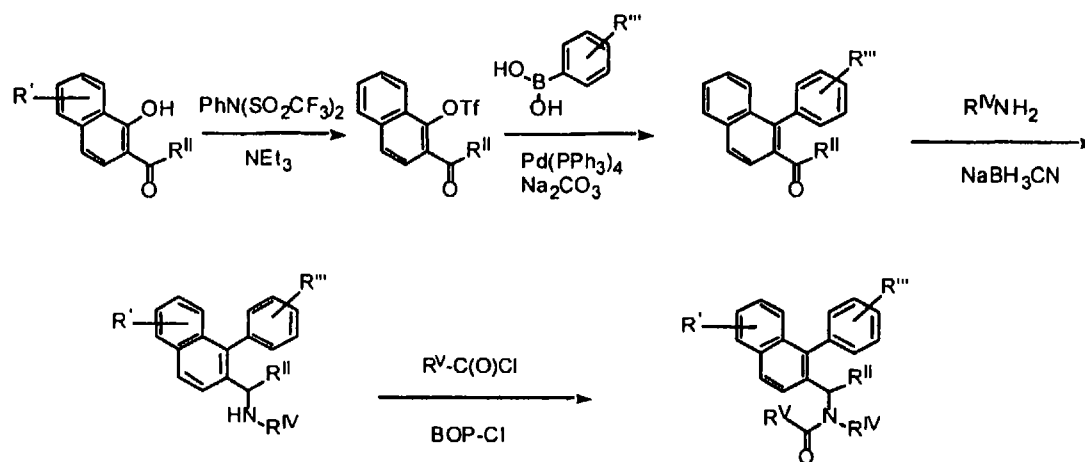
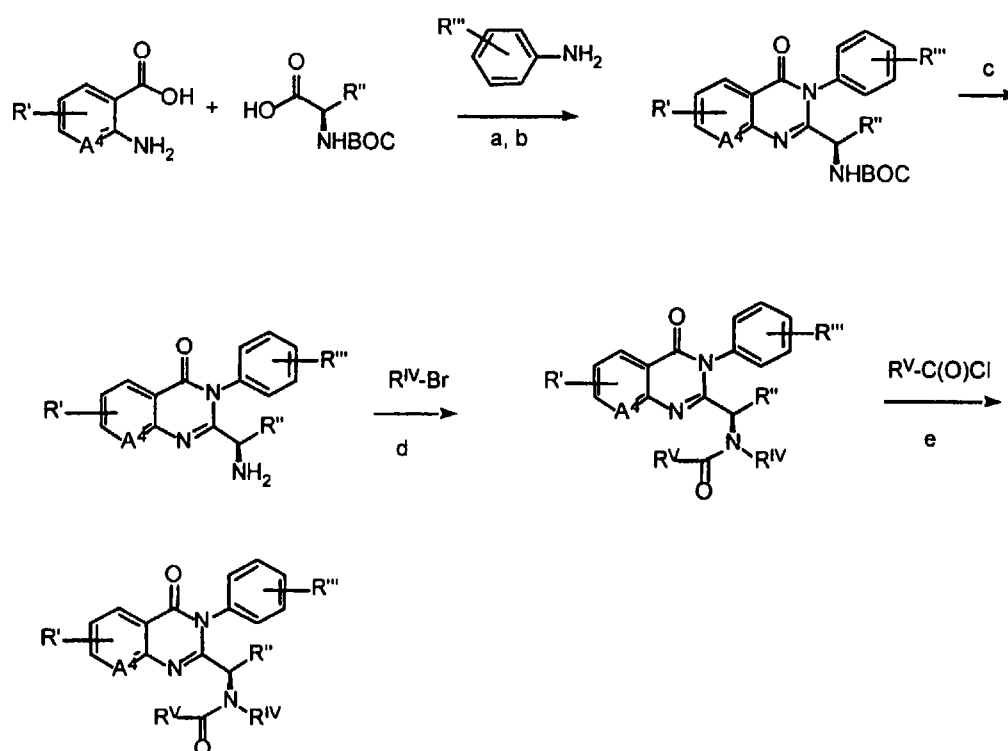


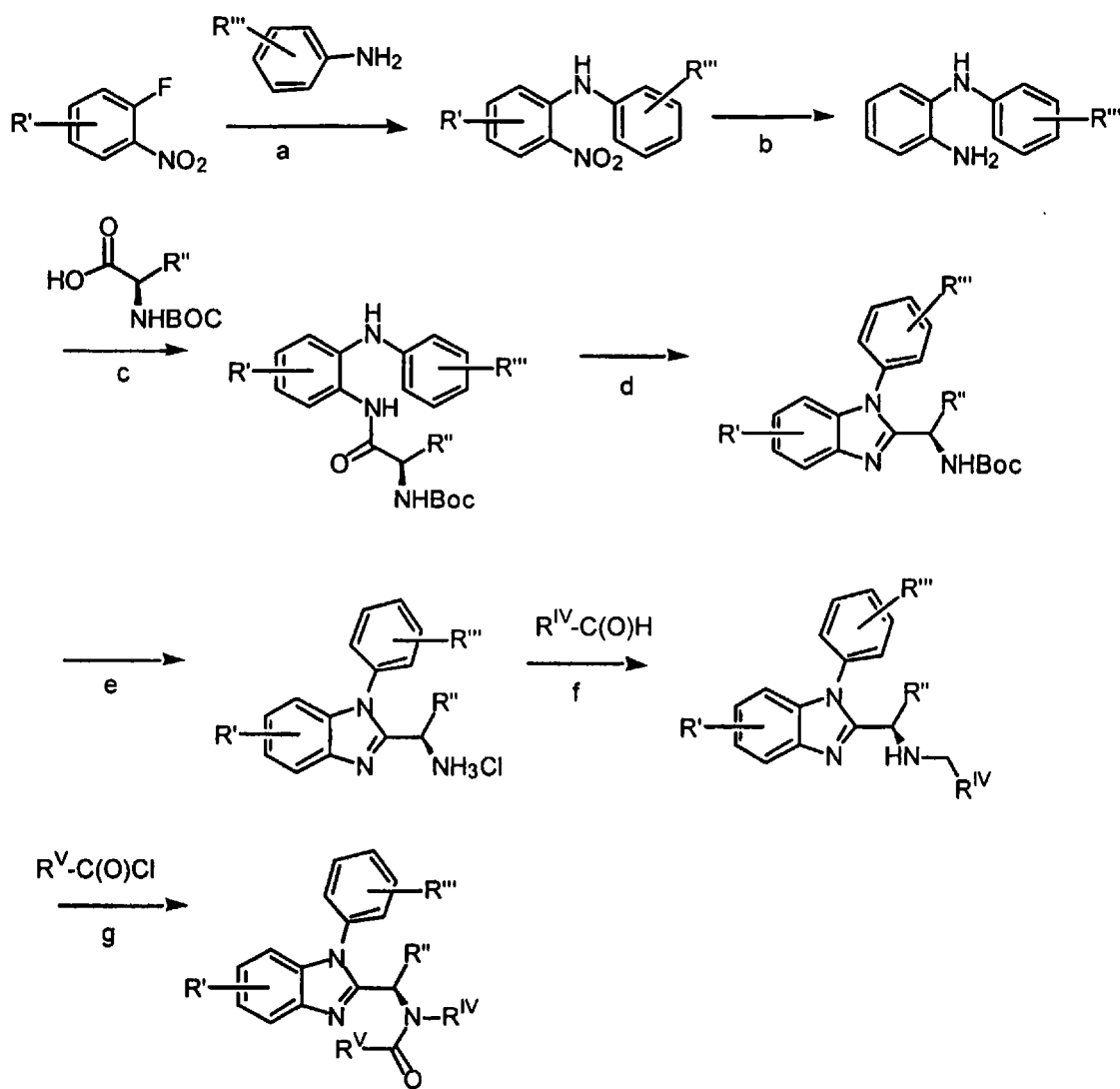
FIG. 4



a. P(OPh)_3 , pyridine, 55 °C, 14 h; b. R^{III} substituted aniline, 55 °C, 1 h;
 c. TMSI , MeCN , 25 °C, 1 h; d. KI , K_2CO_3 , DMPU ; e. EDC , HOBT ,
 CH_2Cl_2 .
 $\text{A}^4=\text{C}$ or N

FIG. 5

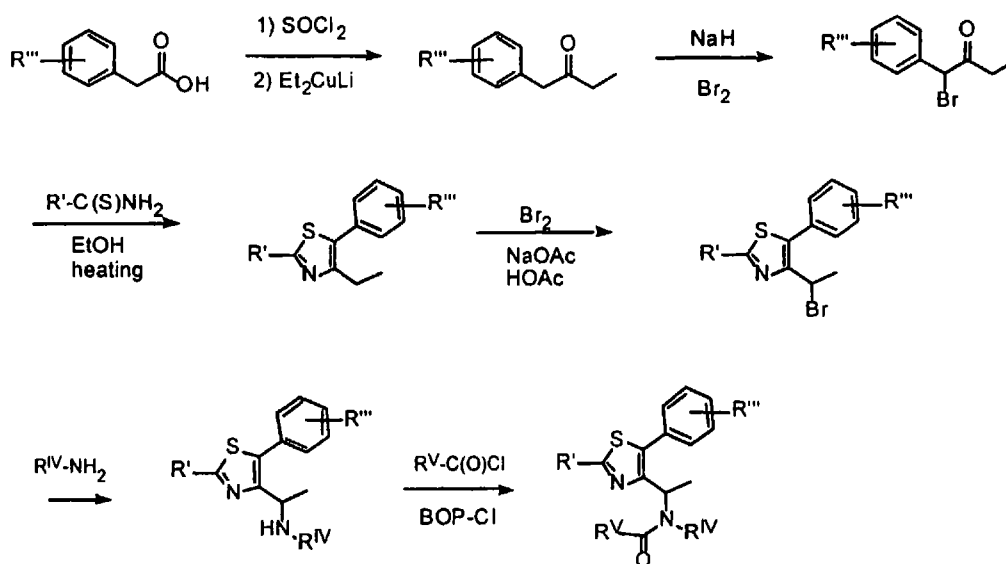
Scheme for the generic synthesis of benzimidazoles



a K₂CO₃, DMF, 125°C, 16h. b H₂, Pd/C, rt. c D-Boc-Ala-OH, EDC, HOBT, NMM, DMF.
d HOAc, 90°C. e 4M HCl in dioxane, EtOAc, rt. f NaBH₃CN, MeOH, rt. g Bop-Cl, Et₃N, THF, rt.

FIG. 6

Part A



Part B

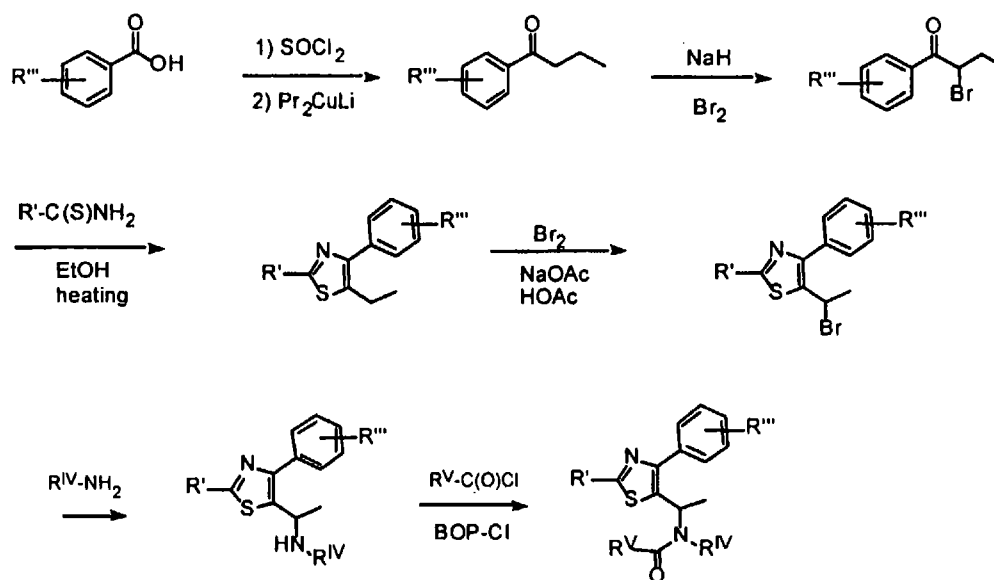


FIG. 7

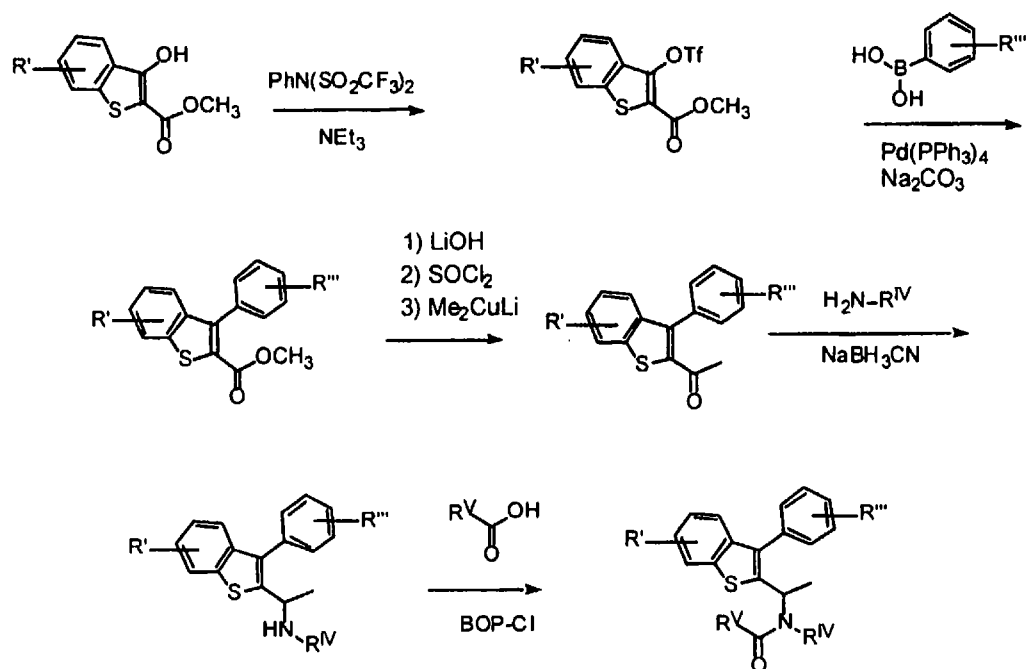


FIG. 8

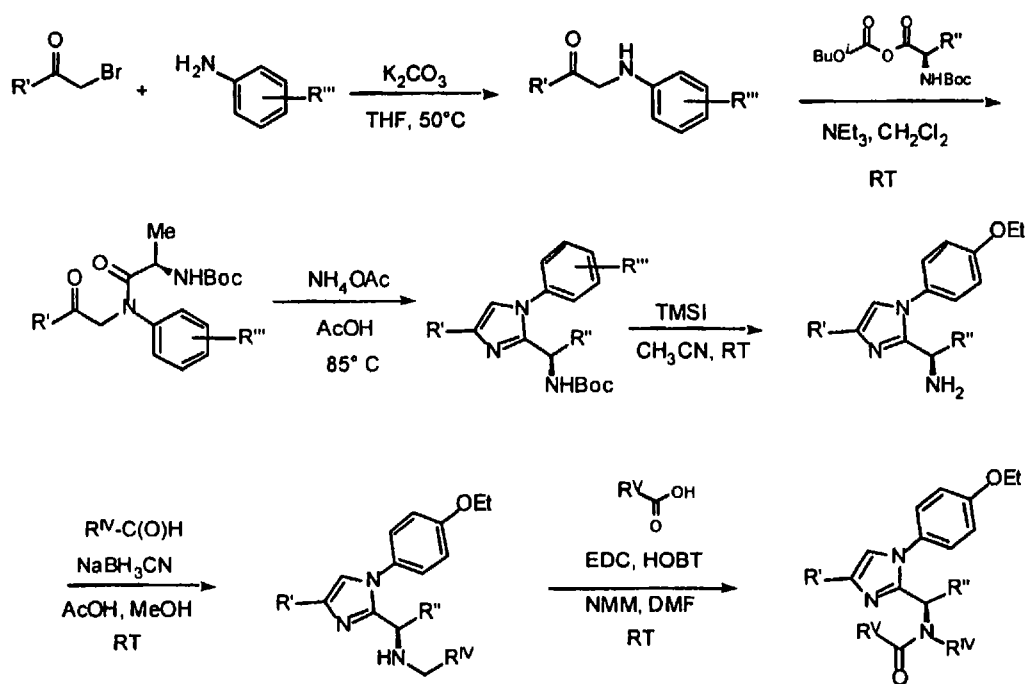


FIG. 9

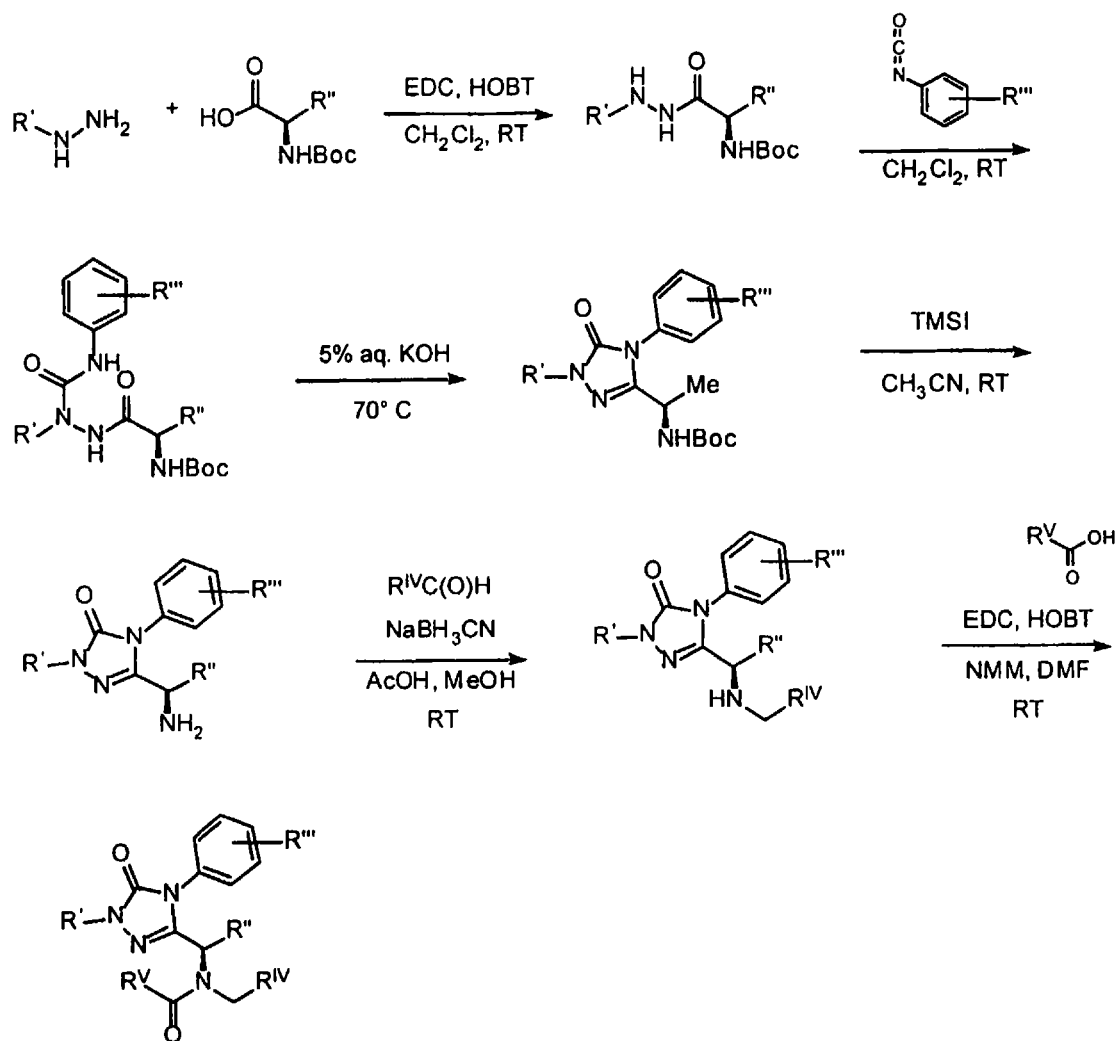
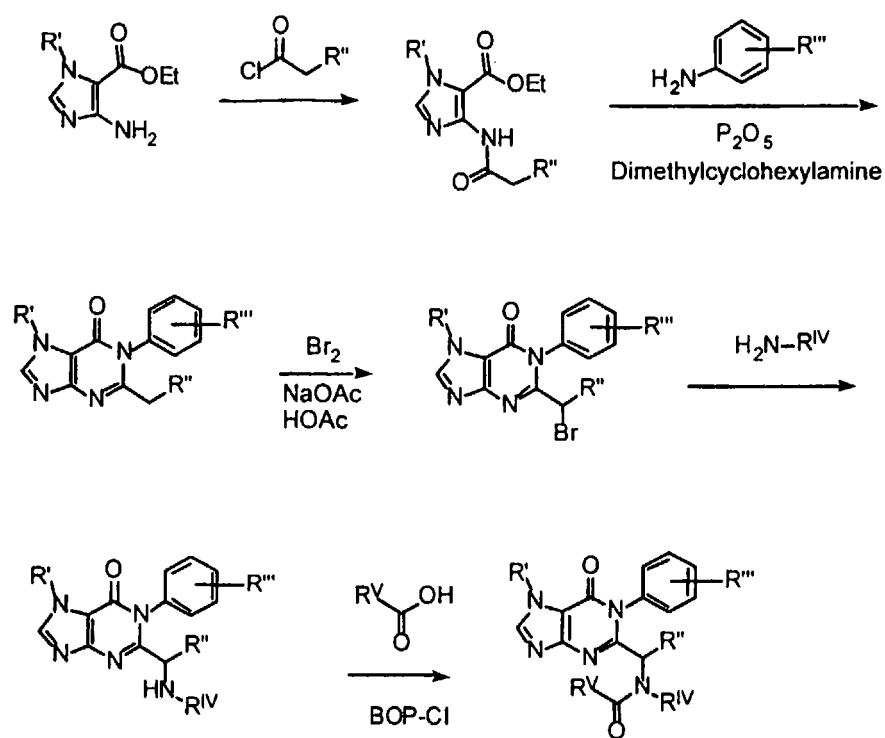


FIG. 10



Ref. Nielsen, F.E.; Pedersen, E.B. Tetrahedron, 1982, 38,

FIG. 11

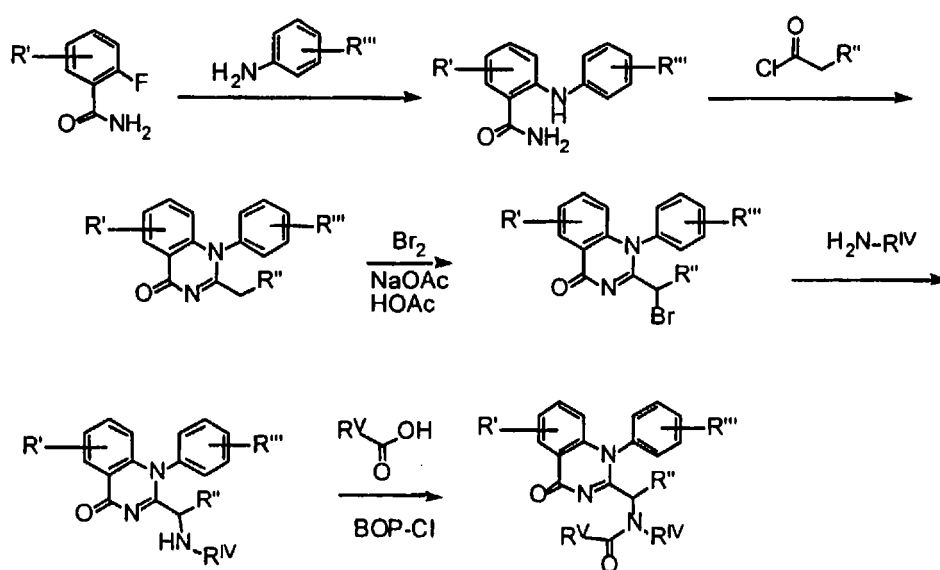


FIG. 12

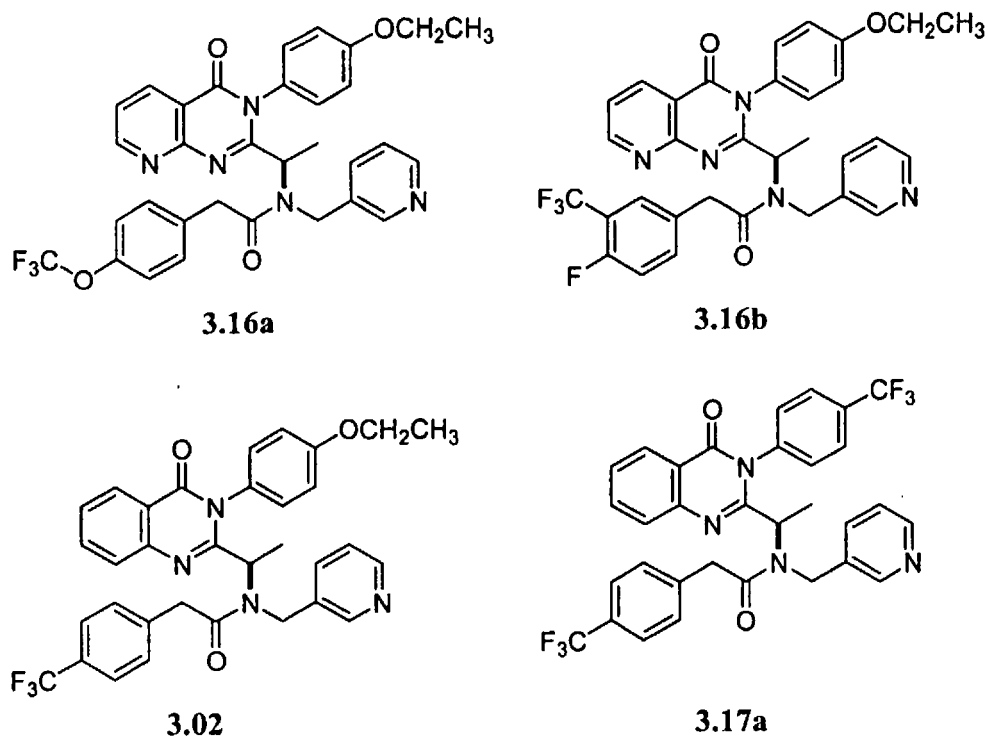


FIG. 13

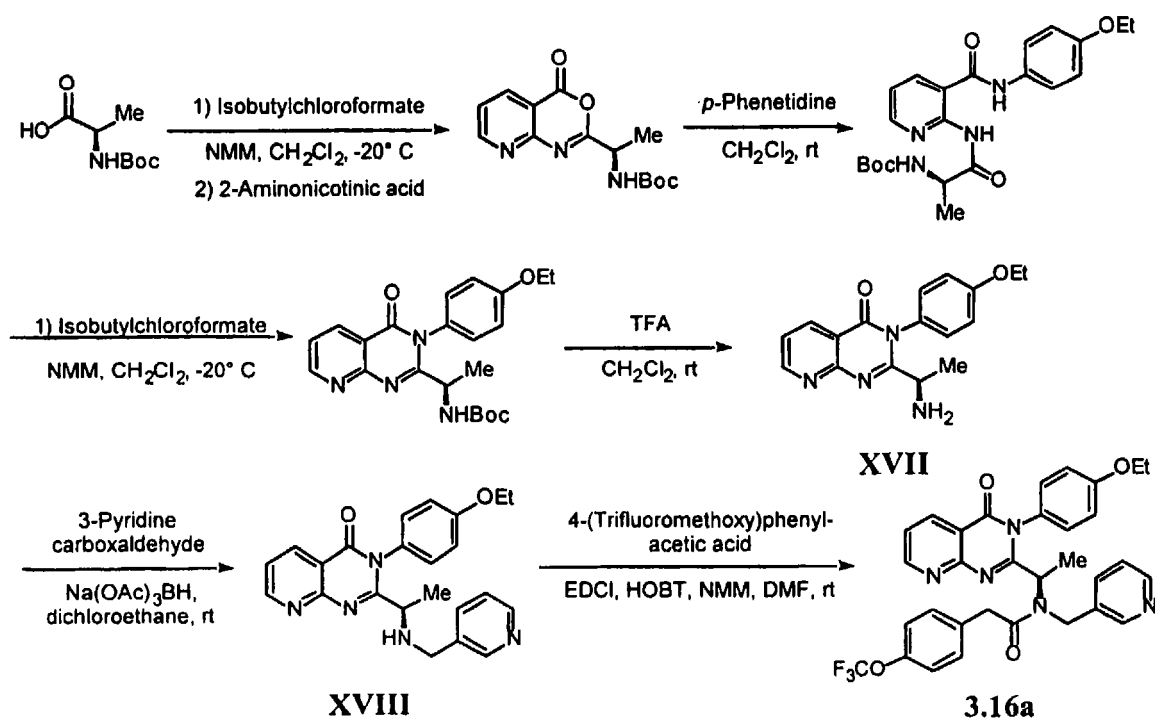
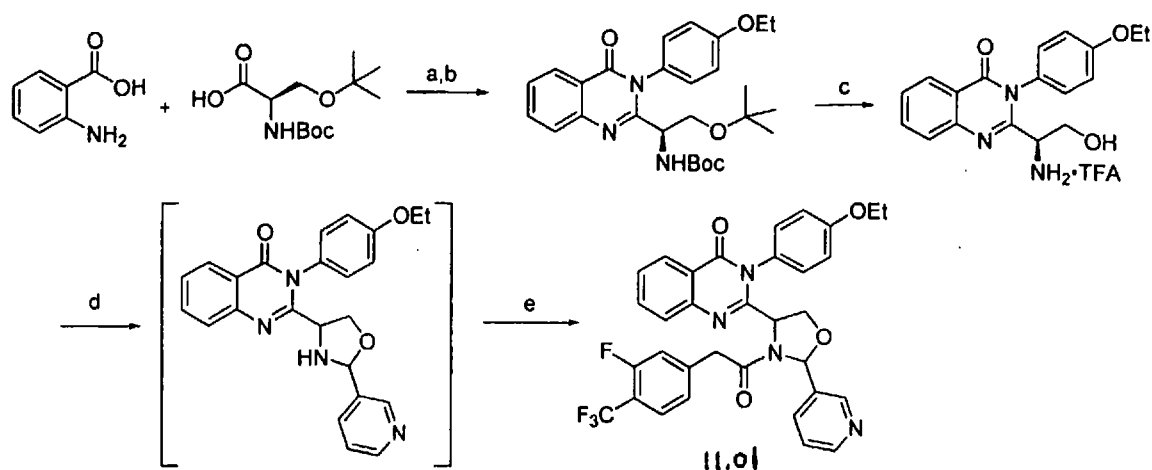
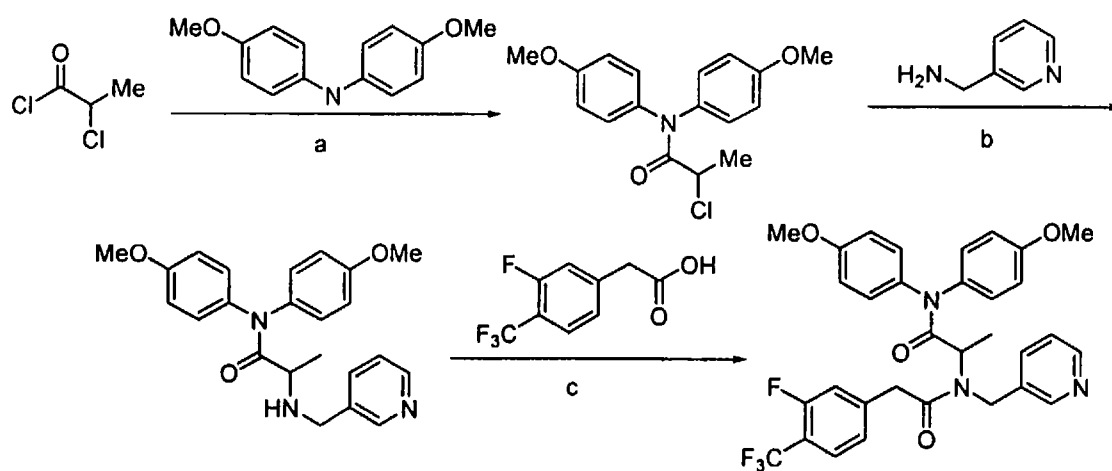


FIG. 14



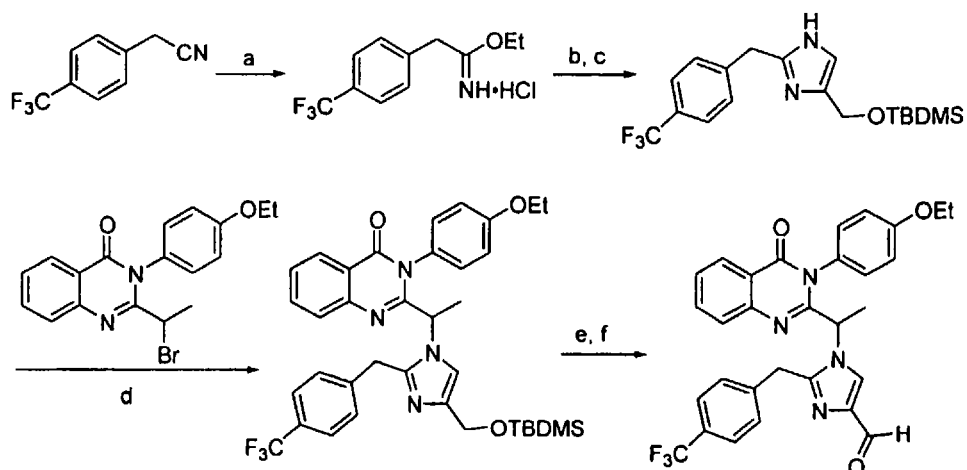
a. P(OPh)_3 , pyridine, 80°C ; b. p-Ethoxyaniline, 50°C ; c. TFA, DCM; d. 3-Pyridylcarboxaldehyde, NEt_3 , MgSO_4 , DCM; e. 3-Fluoro-4-trifluoromethylphenylacetic acid, BOP-Cl.

FIG. 15



a. NEt_3 , DCM; b. EtOH, 90°C ; c. BOP-Cl, DMF.

FIG. 16



a. HCl (gas), EtOH; b. NH₃, EtOH; c. TBDMSCl, Imidazole, DMF; d. K₂CO₃, DMF, 50°C; e. HCl (conc.), EtOH; f. MnO₂, DCM.

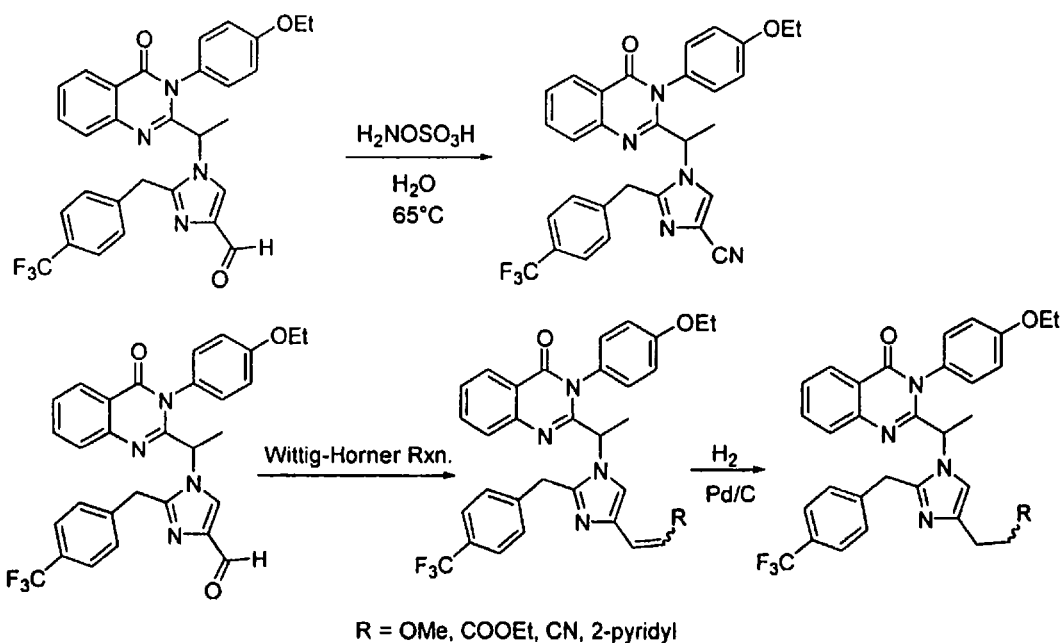
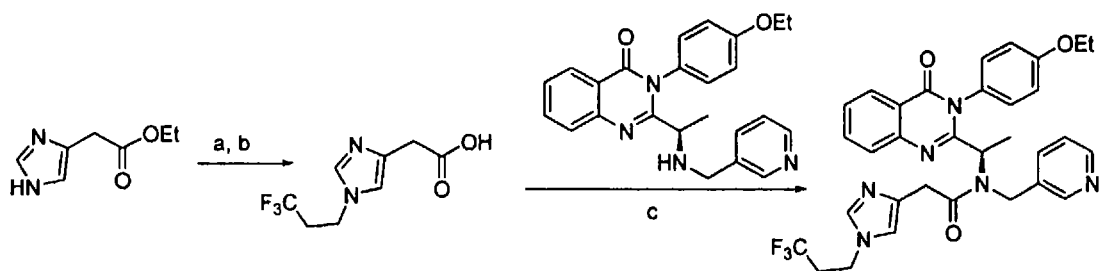
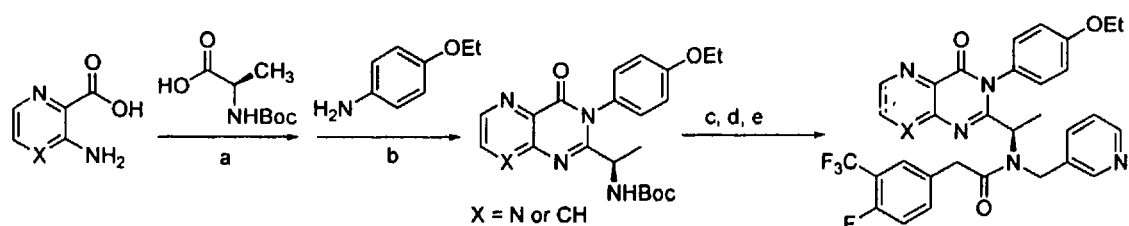


FIG. 17



a. CF₃CH₂CH₂I, K₂CO₃, DMF, 50°C; b. LiOH, H₂O; c. BOP-Cl, NEt₃.

FIG. 18



a. $i\text{BuOCOC}\text{Cl}$, NEt_3 , -20°C ; b. $i\text{BuOCOC}\text{Cl}$, NEt_3 , 0°C ; c. TFA, DCM; d. 3-Pyridylcarboxaldehyde, $\text{NaBH}(\text{OAc})_3$; e. 4-Fluoro-3-trifluoromethylphenylacetic acid, BOP-Cl, NEt_3 .

FIGURE 19

Table

CXCR3 binding assay IC₅₀≥10μM=X; 10μM>IC₅₀≥1μM=XX; IC₅₀<1μM=XXX

Compound	IC50
1.01	XX
1.02	XXX
1.03	XXX
1.04	XX
1.05	XXX
1.06	X
1.07	XXX
1.08	XXX
1.09	X
1.1	XXX
1.11	X
1.12	XX
1.13	XX
1.14	XX
1.15	XX
1.16	XXX
1.17	XXX
1.18	XXX
1.19	XXX
1.2	XX
1.21	XXX
1.22	XXX
1.23	XXX
1.24	XXX
1.25	XXX
1.26	XXX
1.27	XXX
1.28	XX
1.29	XXX
1.3	XXX
1.31	XX
1.32	XXX
1.33	XX
1.34	XXX
1.35	XX
1.36	XX
1.37	XX
1.38	XX
1.39	XXX
1.4	XX
1.42	XX
1.43	XXX
1.44	X
1.45	X

Compound	IC50
1.47	XX
1.48	XXX
1.49	XXX
1.5	XX
1.51	X
1.53	XXX
1.54	XXX
1.55	X
2.01	XXX
2.02	XXX
2.03	XX
2.04	XX
2.05	XXX
2.06	XXX
2.07	XXX
2.08	XXX
2.09	XXX
2.1	XXX
2.11	XXX
2.12	XXX
3.01	XXX
3.02	XXX
3.03	XXX
3.04	XXX
3.05	XXX
3.06	XXX
3.07	XXX
3.08	XXX
3.09	XXX
3.1	XXX
3.11	XXX
3.12	XXX
3.13	XXX
3.14	XXX
3.15	XX
3.16	X

Compound	IC50
4.01	XXX
4.03	X
5.01	X
6.01	XXX
6.02	XX
7.01	XX
8.01	X
9.01	XXX
9.02	XXX
9.03	XXX
9.04	XXX
9.05	XXX
9.06	XXX
9.07	XXX
9.08	XXX
9.09	X
9.10	
10.01	XXX
10.02	XX
10.03	XXX
10.04	XXX
10.05	XXX