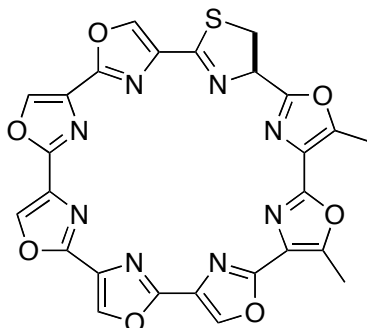


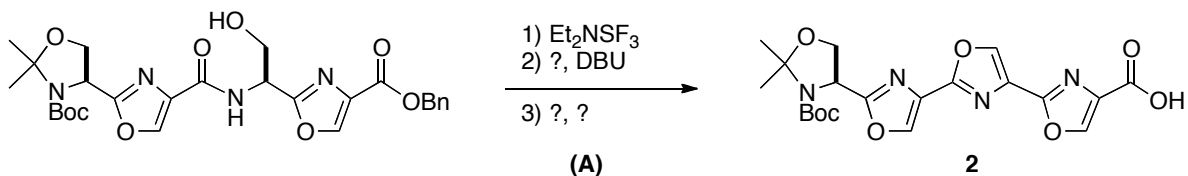
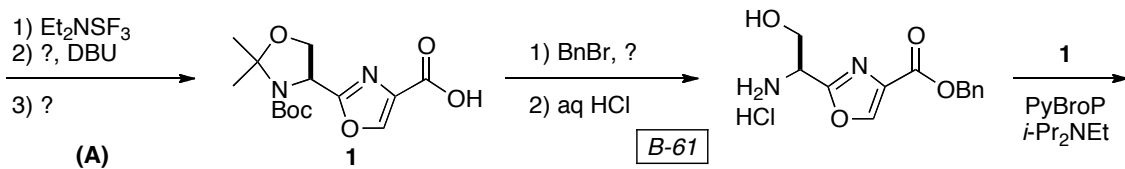
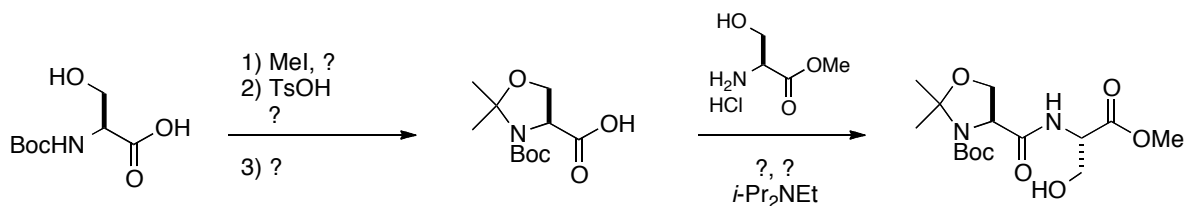
(-)-Telomestatin (210306-TKGP)

T. Doi, T. Takahashi<sup>1)</sup>

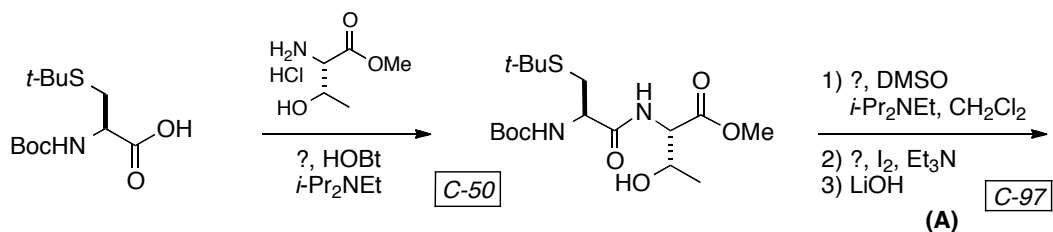


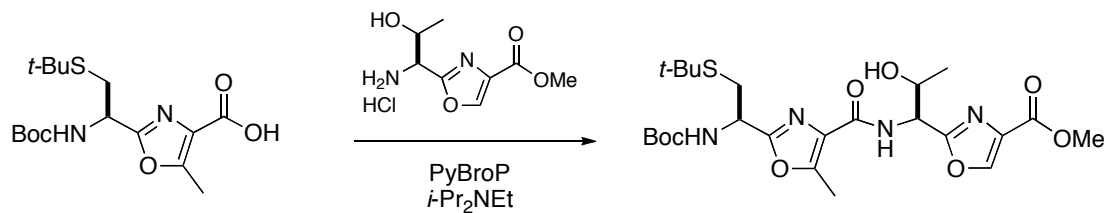
**Activity** Telomerase inhibitor (テロメラーゼ阻害剤)

**Key Reactions** (A) oxazole formation, (B) macrolactamization, (C) oxazoline formation, (D) thiazoline formation



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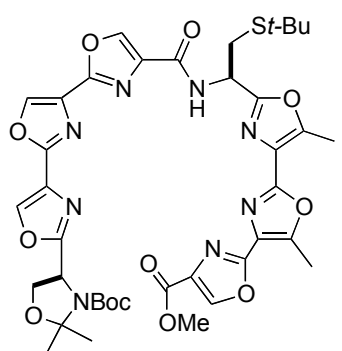
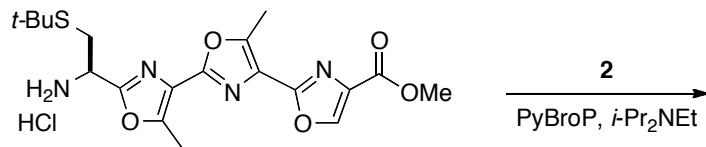




1) Burgess reagent  
 2) ?, DBU  
 3) aq HCl

(A)

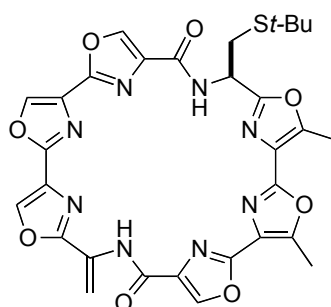
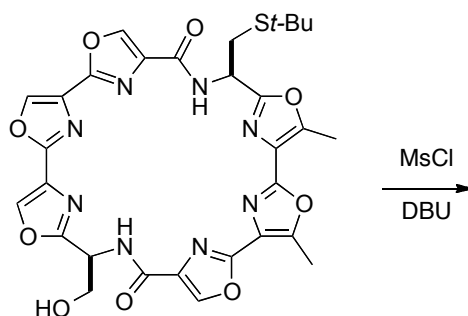
B-64



(B)

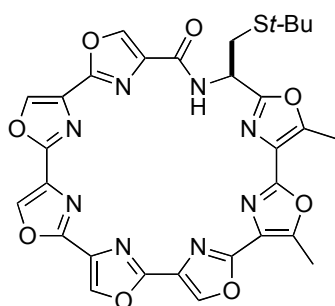
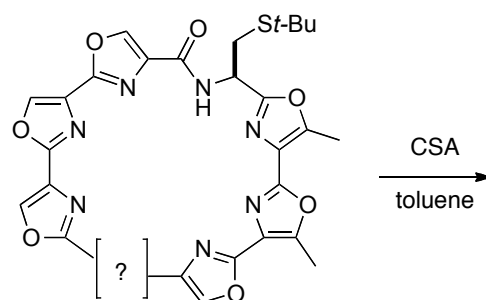
C-22

1) aq HCl  
 2) LiOH  
 3) DPPA, ?  
 DMAP, *i*-Pr<sub>2</sub>NEt



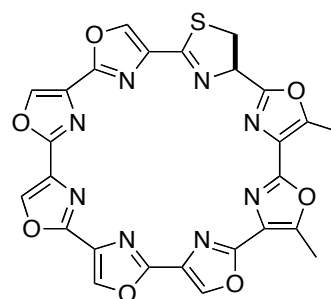
(C)

1) NBS  
 CH<sub>2</sub>Cl<sub>2</sub>-MeOH  
 2) K<sub>2</sub>CO<sub>3</sub>  
 dioxane



(D)

Ph<sub>3</sub>PO-Tf<sub>2</sub>O  
 anisole  
 CH<sub>2</sub>Cl<sub>2</sub>



(-)-Telomestatin

**Reference:**

- 1) T. Doi, M. Yoshida, K. Shin-ya, T. Takahashi, *Org. Lett.*, **8**, 4165 (2006)