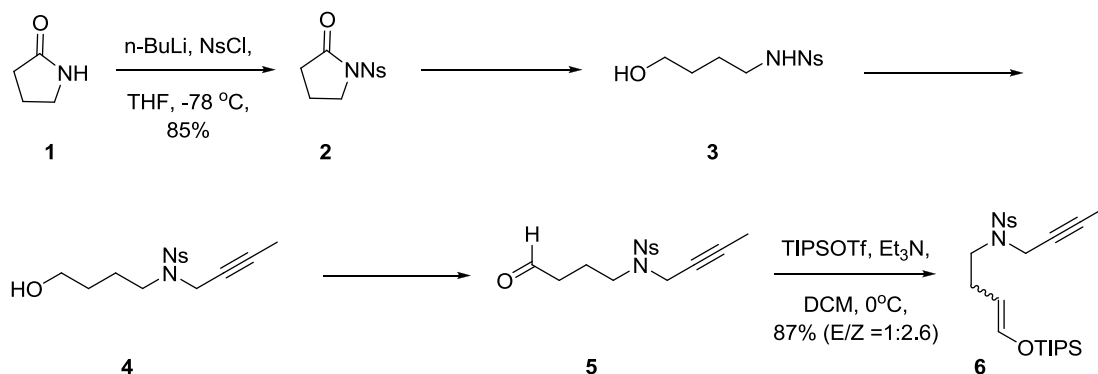
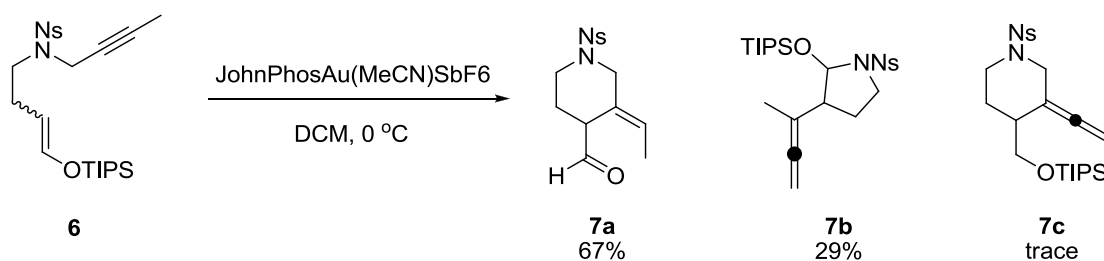


## Total Synthesis of (±)-Conolidine and (±)-Apparicine

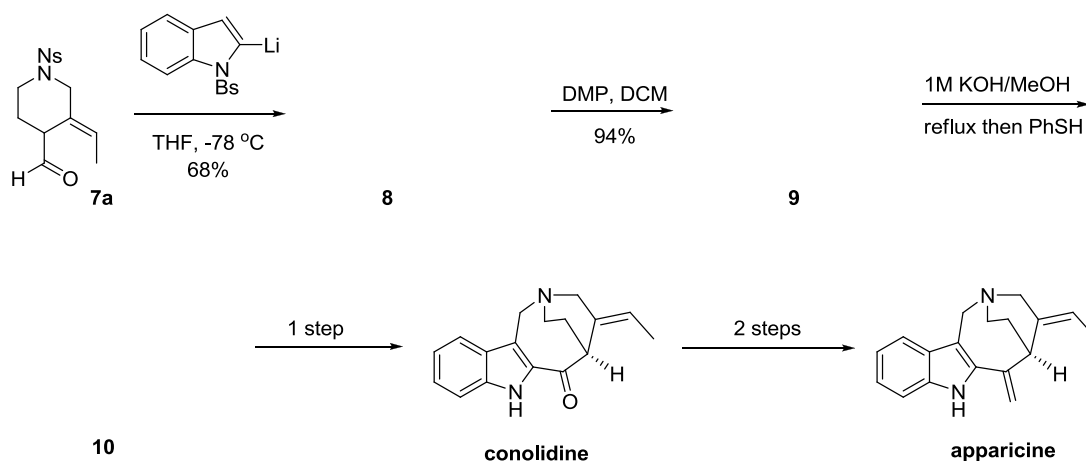
1. Please give the missing reagents for forming compound **5** from compound **2**.



2. Please suggest the mechanisms for forming these 3 products

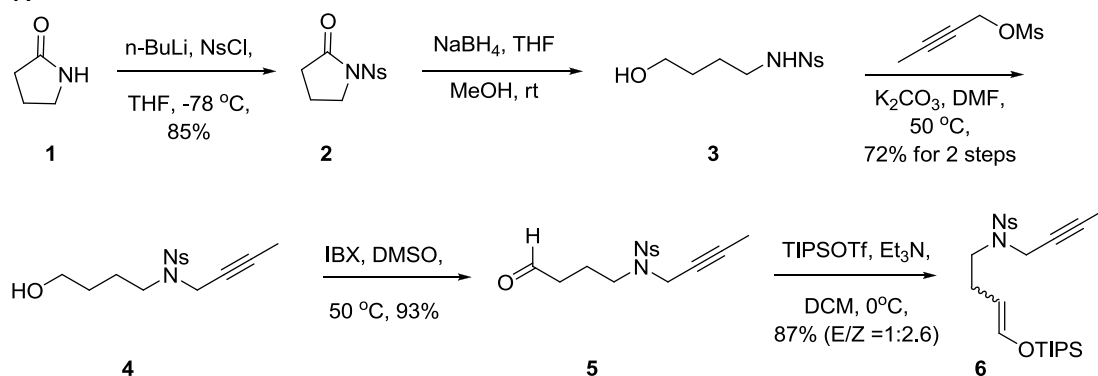


3. Please provide the missing compounds and reagents from **10** to **apparicine**.

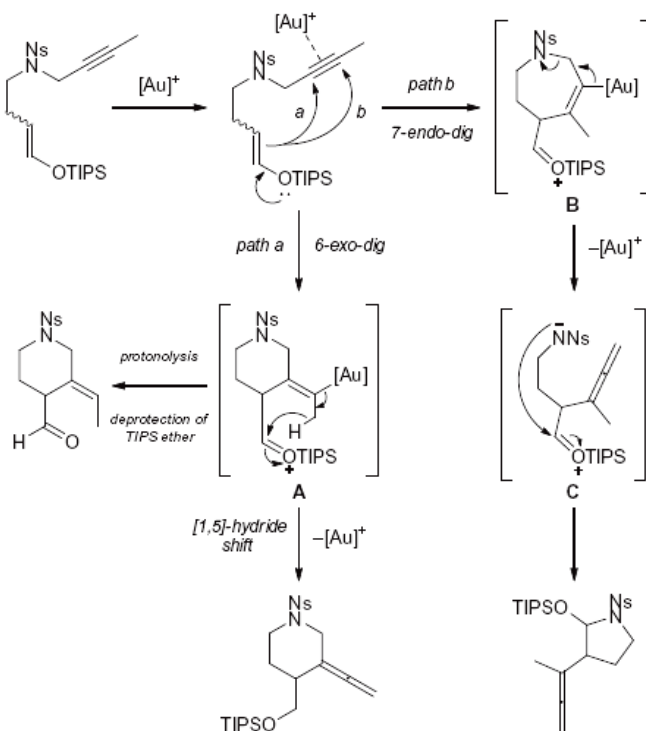


**Solution: Tetrahedron Letters, 2016, 57, 375-378**

1.



2.



3.

