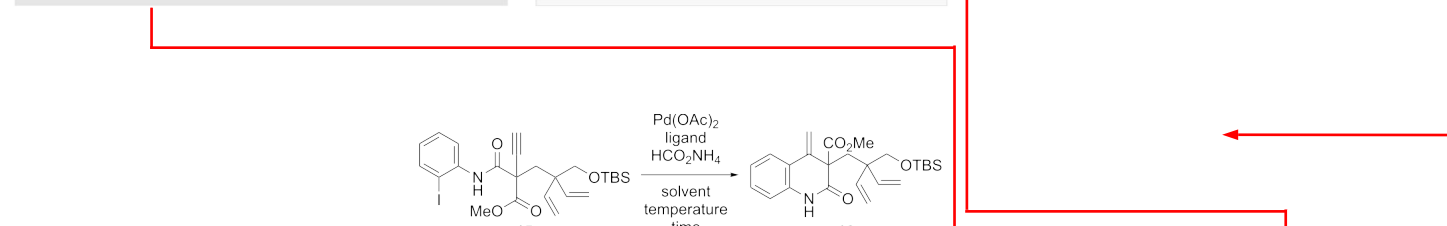
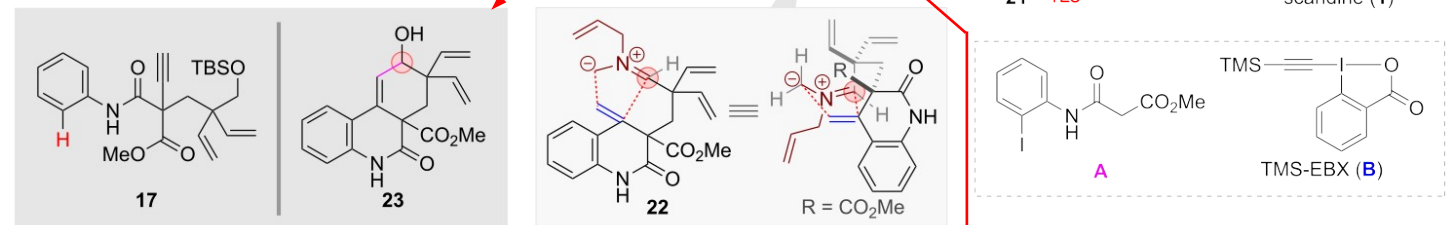
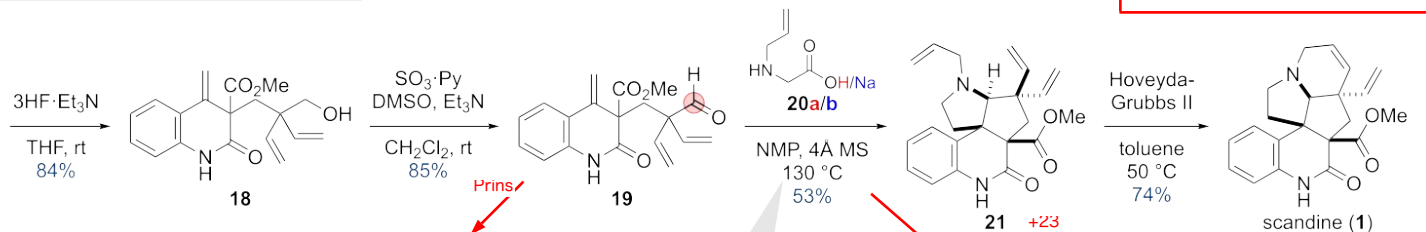
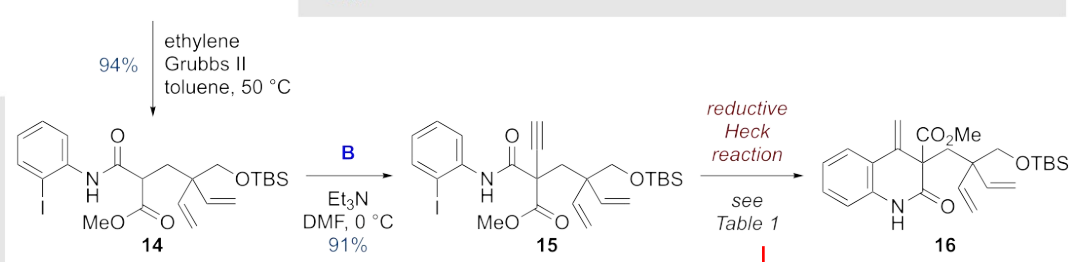
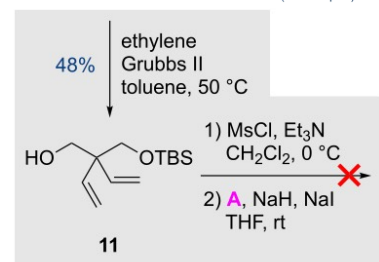
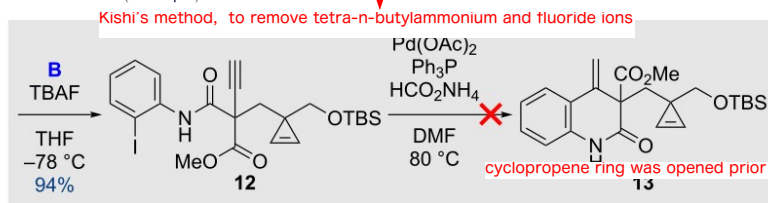
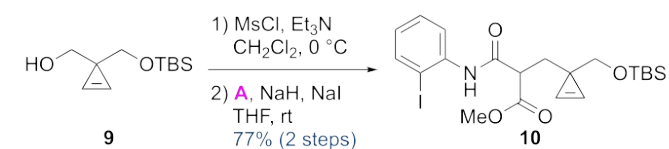
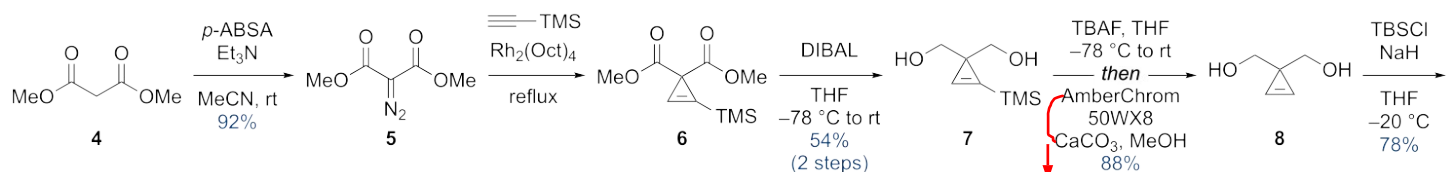


Total Synthesis of Scandine

Takumi Kitamura, Kaito Morita, Nariyoshi Umekubo, and Satoshi Yokoshima*
 JACS Au 2026, 6, 2198–2202.

Melodinus alkaloids



| entry | ligand | solvent | temperature (°C) | time (h) | yield (%) | | recovered starting material (%) |
|-------|----------------------------------|-------------|------------------|----------|----------------|----------------|---------------------------------|
| | | | | | 16 | 17 | |
| 1 | Ph ₃ P | DMF | 80 | 8 | 24 | 12 | 23 |
| 2 | P(<i>o</i> -tolyl) ₃ | DMF | 80 | 8 | - ^b | - | - |
| 3 | dppp | DMF | 80 | 8 | 26 | 28 | 25 |
| 4 | dppb | DMF | 80 | 8 | 44 | - | - ^c |
| 5 | dppf | DMF | 80 | 8 | 43 | 18 | 20 |
| 6 | dppb | 1,4-dioxane | 80 | 12 | - ^d | - | - |
| 7 | dppb | MeCN | 80 | 12 | 26 | - ^e | 57 |
| 8 | dppb | MeOH | 80 | 12 | 40 | - | 57 |
| 9 | dppf | MeOH | 80 | 12 | 66 | - ^e | 13 |
| 10 | dppf | MeOH | 80 | 36 | 70 | - | - |
| 11 | dppf | MeOH | 90 | 12 | 77 | - | - |

^aEach reaction was conducted in a 0.04 mmol scale in the presence of Pd(OAc)₂ (10 mol %), ligand (20 mol %), and HCO₂NH₄ (1.5 equiv).
^bOnly a trace amount of 16 was detected. ^cOnly a trace amount of the starting material (15) was recovered. ^dNo reaction. ^eOnly a trace amount of 17 was detected.

the acidity of the reaction mixture was modulated to suppress Prins reactions which is facilitated under acidic conditions

